Preventing Childhood Obesity

Epode European Network Recommendations

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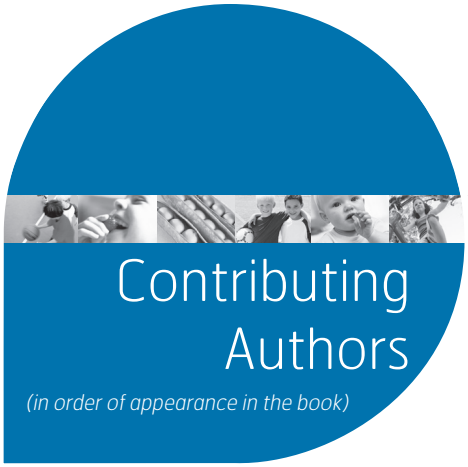

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Foreword

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The current publication comes at a crucial time in the European policy area of nutrition and physical activity. We are now half-way through the EU Strategy for Nutrition, Obesity and Overweight-related issues; governments and policy actors around the world and in international organisations such as the WHO and the OECD also engage increasingly in the issue; and studies establish further the links to the prevention of disease and chronic conditions that affect people's well-being and prosperity and pose a burden on healthcare systems.

Children and the issue of nutrition and physical activity have been a central issue in the context of the EU's Nutrition Strategy which has led Member States as well as stakeholders to engage not only in substantial discussion but also in concrete action to tackle the issue. EPODE is amongst the actions that were recognised from the inception of the EU's Nutrition Strategy which mentions it as an example. But it also represents action that combines some of the Strategy's key elements: the partnership approach, the need to engage research and academia and the importance of reaching out to local communities and engaging key actors to sustainable continuous action which is monitored as to its outcomes.

Moreover, the focus on children has been a consistent priority of the EU's work on nutrition and physical activity and was recently confirmed by the stakeholders engaged in the EU's Platform on Diet and Physical Activity when renewing the objectives of the Platform's work for the coming years. We must always keep in mind that work done around children and nutrition and physical activity is an investment into the lives of the citizens of tomorrow: their happiness and productivity. This is why the European

Commission welcomes the work done and presented in this book in the framework of EPODE which is also financed by the EU's Health Programme.

In the number of years that the programme was developed, it evolved and increased its outreach. We therefore all look forward to reading its results and learning from them. This publication will allow all of us to become familiarised with the methods and outcomes of the work carried out in the programme. More importantly, it is one step further in one of our on-going challenges when working against diseases related to nutrition and physical activity: the need for indicators that allow us to measure the problem, the efforts made to tackle it and the results achieved. The present publication is one way of working towards this direction. With further work and effort from all engaged but also those who can still participate and benefit the results further we can hopefully have a set of data that allow us to clearly identify trends in obesity and the absence of physical activity, two of the key factors towards preventing serious chronic diseases.

We therefore welcome the set of recommendations of the publication as a contributing element to the knowledge and action that needs to be built up if we wish to have a sustainable policy against the challenge of children obesity with long-term results.

Despina Spanou

Preface

Jean-Michel Borys,
EPODE European Network Director

This book emerges from the **EPODE European Network** (EEN) project, a collaborative and multidisciplinary initiative whose objectives have been to develop and disseminate recommendations for the implementation of community-based interventions aimed at **preventing childhood obesity**. Supported by the European Commission (DG SANCO) and private partners, the EEN gathered multiple contributions from institutions, academia, national and local authorities, public health experts and professionals, civil society organisations, private stakeholders and industrial partners between 2008 and 2011. It is a great pleasure to introduce the contents of this book, which are the result of broad process of consultation, research, dialogue and experience-sharing.

PART 1 of this book contextualises the genesis of the EEN, as a project based on the EPODE methodology and its pillars.

Non-communicable diseases, including obesity, diabetes, cardiovascular diseases, cancer and chronic respiratory diseases together represent the main cause of death worldwide. Their prevalence has caused alarming trends in most countries across the world. Overweight and obesity are recognised to be a pathology (WHO, 1997) but also one of the main risk factors of these diseases. Institutions, governments and multiple actors have developed major recommendations and action plans over the past few years to foster innovative solutions. If we know what to do, the issue remains how we can make it happen. Although signs of stabilisation are now observed for certain

children age groups in some countries, the annual rate of increase in the prevalence of childhood obesity has been growing steadily, which creates a major health challenge for the next generation. Over the past twenty years, studies have demonstrated that the prevention of overweight and obesity is possible through multi-stakeholder and multilevel interventions targeting lifestyles, in particular diet and physical activity **(chapter 1)**.

EPODE (*Ensemble, Prévenons l'Obésité des Enfants / Together Let's Prevent Childhood Obesity*) is a Community-Based Interventions methodology considered to be an innovative example of a community project aimed at promoting healthy behaviours and preventing obesity in children **(chapter 2)**. From 10 French pilot towns – *that have globally experienced a downward trend in the prevalence of childhood overweight and obesity over the last 5 years* – EPODE implementation has now been scaled up to more than 300 European towns. Fostering such dynamics was at the core of the **EPODE European Network (EEN)**. Endorsed by the EU Directorate General for Health and Consumers, together with the key involvement of four major European Universities – the *Free University of Amsterdam, University of Ghent, University of Saragossa and University of Lille 2* – and the support of four private partners – *Ferrero, Mars, Nestlé and Orangina Schweppes* – the EEN was launched in 2008. Its objectives have been to develop recommendations aimed at enriching EPODE methods and programmes, to favour experience sharing with teams from other European countries and regions **(chapter 3)** and to foster dissemination of the methodology.

PART 2 of this book is an opportunity to open access to the research and recommendations developed from the EEN project.

The EEN worked to better document and conceptualise EPODE keys for successful interventions related to the **4 important pillars** of the EPODE methodology:

1. A decoding of local institutional factors guaranteeing an effective and sustainable roll-out of EPODE-like programmes **(chapter 4)**.
2. A deeper look into EPODE coordination methods for network dynamics and behaviour changes in the populations (especially social marketing) **(chapter 5)**.
3. Optimised public-private partnerships management rules maximising public health benefits while considering roles, contributions and interests of all partners with transparency **(chapter 6)**.
4. A fine-tuned EPODE scientific evaluation framework **(chapter 7)**.

Part 3 of this book is devoted to giving a voice to various stakeholders who have shown a strong interest in deploying EPODE methodology and similar approaches in their regions and countries, and also to present EPODE progress and perspectives at European and international levels.

The EEN was also aimed at facilitating the implementation of large-scale community-based interventions using the EPODE methodology in other European countries and regions. Since the beginning of the project, the EPODE methodology has been used in several programmes beyond EPODE, VIASANO and THAO. The PAIDEIATROFI programme, which started in 2008 in Greece, programmes such as the Healthy Weight Communities developed in 2009 in Scotland, the JOGG programme developed in 2010 in the Netherlands and the national movement "I am living healthy, too! / SETS", launched in Romania, have also been inspired by EPODE. This book is also an opportunity to highlight other dynamics that have emerged in other countries such as Iceland, Portugal and Malta **(chapter 8)**.

The EPODE methodology has also raised a great deal of interest outside Europe and is currently being adapted by the Government of South Australia in the OPAL Programme and in Mexico in the framework of the National "5 Pasos" Plan launched by the Ministry of Health to promote healthier lifestyles and prevent chronic diseases. Interest from other teams around the world in developing a programme inspired by the EPODE methodology is still growing, which brings opportunities to further support the deployment of community-based interventions aimed at preventing childhood obesity and non-communicable diseases on a larger scale **(chapter 9)**.

Part 1

The challenges of childhood obesity prevention: from EPODE to the EPODE European Network

Chapter 1

Review of strategies to prevent childhood obesity

Jean-Michel Borys, Yann Le Bodo

Our aim is not to produce a new review of the literature on obesity prevention (more than 30 have been published in the major journals since 2005) or set out a new theoretical approach (many frameworks exist, around 20 international reports having appeared in the last few years). Here we have chosen rather to cast a critical eye on prevention practitioners on the ground, a pragmatic approach, a perception backed up by the literature, the many reports, discussions and experiences on the ground.

1. Why must obesity be prevented?

The first seemingly obvious reason is that of individual health: the physical, mental and social health of individuals. In terms of public health, obesity has multiple consequences, particularly economic ones which are on the increase in all of the countries of the planet (World Health Organization, 2004; Institute of Medicine, 2005).

Does prevention carry economic benefits? This continues to be discussed largely according to the criteria taken into account (Promotion Santé Suisse, 2010). If we take the example of the *"Trust for America's Health"* and its report published in 2009, in terms of return on investment, every dollar invested is done so at a loss over the first

two years, but, yields 5.6 dollars after 5 years and 6.2 dollars in the period between 10 and 20 years (Levi, 2009). All of these calculations are open to criticism. Nevertheless, it would seem that combined approaches offer the best value for money in terms of prevention and economic objectives (Murray *et al.,* 2003).

2. Understanding the determining factors for prevention

In order to prevent obesity, its multiple determining factors must be understood with the subtle balancing of genetic make-up, individual behaviours and the impact of the environment. Many theoretical frameworks exist, with arguments in favour of the protective or aggravating role of a given behaviour or diet (Antipatis *et al.*, 1999; Kumanyika *et al.*, 2010).

On an individual level, weight gain is based on **contributing factors** such as the absence of breast-feeding, premature weaning, an abundant supply and availability of food, a reduction in physical activity, an excess of proteins in childhood, mediocre sleep quality, pollution, social stress, socio-economic status, culture, parenting styles, etc.

There are genetic **predisposing factors**, relating to *in utero* development or colon flora, **trigger factors** of psychological origin such as stopping smoking, sport, puberty, pregnancy, menopause, sexual abuse and **maintaining factors** such as, for example, a succession of restrictive diets (Dubois and Girard, 2006; World Cancer Research Fund and American Institute for Cancer Research, 2007).

3. Identifying prevention stakeholders

Obesity prevention stakeholders are multiple and are not limited to health professionals (Brownson *et al.,* 2006).

The individual's immediate social circle is key but politicians, economic stakeholders, local stakeholders, teachers, media, town planners, sociologists all have a role to play in the area of prevention (Kumanyika *et al.*, 2010).

The difficulty is that each stakeholder has his or her own language with its own complexity, priorities, and timescale and there is therefore a very great necessity for obesity prevention to translate the language of others for each individual, to join together and most of all to go beyond medical boundaries.

Politicians need to understand the necessity for intervention. They ask experts for evidence of effectiveness and the potential impact of decisions, but, for the big issues, evidence is severely lacking.

Unfortunately, if we wait for all the evidence action will not be taken and the phenomenon will grow. There is a gulf that is often immense between experimental study and its

lasting transposition on a community- or country-wide scale as well as a gulf between the expectations on the ground and those of experts.

All of this requires a multidisciplinary approach in a scientific world that is often compartmentalised (Bluford *et al.*, 2007; Butland *et al.*, 2007; Brown and Summerbell, 2009).

4. Setting out the framework for prevention

From a population-wide perspective, obesity prevention means a reduction in the average BMI (Body Mass Index) and a reduction in the proportion of the population with a high BMI. Adults with a healthy weight must maintain it and young people must avoid excessive weight gain.

It seems illusory to act on one or several single factors and to reduce obesity prevention to "eat better, move more".

It is also illusory to take action with regards to individuals alone and to limit oneself to informing and awareness-raising; steps that are necessary, but insufficient.

In terms of prevention we might suggest **universal prevention**, which is aimed at the whole population without pre-selection. It has the advantage of being global and non-stigmatising, but the disadvantage of requiring a large infrastructure (Torgerson *et al.*, 2007).

Universal prevention is close to the promotion of health and healthy behaviours. It is very cumbersome to implement and evaluate. It is a long-term strategy with high costs but many secondary benefits that go far beyond the area of health such as, for example, social cohesion.

Prevention can be **selective**, directed at the sub-groups of the population who are at risk from developing obesity. In selective prevention there is an identification of at-risk sub-groups and specific interventions, but few legislative changes. Environmental interventions are limited, individual support greater and evaluation more specific.

Targeted prevention is directed at very high-risk individuals or those that are already obese. The healthcare system plays a major part in therapeutic interventions, whether pharmacological or not, and evaluation is facilitated (Torgerson *et al.*, 2007, Kumanyika *et al.*, 2010).

On the whole a **combined approach** is necessary. The population-wide approach is not effective if there is no support for high-risk subjects and the individual approach is unlikely to work in a lasting way if the community is not prepared at the same time (Puska, 2002; Centers for Disease Control and Prevention, 2005; Doak *et al.*, 2006; Ogden *et al.*, 2007).

5. From information to prevention

Many nutritional labelling prevention and information campaigns have been implemented over the last 30 years (Nordic Nutrition Recommendations, 2004; Food and Drug Administration, 2008).

They are limited due to the fact that they are based on the idea that consumers make rational choices.

The consumer often has difficulty understanding when faced with the messages conveyed, which can sometimes sound unpleasant. The consumer is subjected to different environmental stimuli which can skew his or her assessment. The availability and composition of foods are more effective levers for action than price. According to INRA's report based on collective research, childhood and old age are the two periods of life that are the most favourable for behavioural medications, and underprivileged groups remain the least responsive to prevention messages. The evaluation of these campaigns is absent or incomplete (Ministère de la Santé, de la Jeunesse et des Sports, 2007; Etiévant *et al.*, 2010; Ouiller and Sauneron, 2010).

In terms of **eating habits**, generic information and prevention campaigns have little short-term impact on behaviours when used in isolation. Conversely, an information strategy combining different tools and targeting individuals and groups of individuals allows action to be taken on eating habits (Galani and Schneider, 2007; Mayer, 2009).

Global approaches are becoming more systematic, such as for example the National Nutrition and Health Programme (*Programme National Nutrition Santé* - PNNS) in France which initially looked at providing information and developing benchmarks before focusing on activities on the ground by implementing PNNS towns and creating a partnership with the EPODE (*Ensemble Prévenons l'Obésité des Enfants / Together Let's Prevent Childhood Obesity*) network (Ministère de la Santé et des Solidarités, 2006; Katan MB, 2009; Romon *et al.*, 2009).

The limitations of public health campaigns are the difficulties related to reaching people who are not aware of the problem, as well as obese people belonging to underprivileged social groups (Peretti-Watel *et al.*, 2009). There are difficulties in adapting messages to consumers and studies show that consumers know how to eat well, but just do not do so. If the impact on mentalities is proven, it is less true of behaviours (Ouiller and Sauneron, 2010).

On the whole, a review of the literature shows that universal community interventions are the most effective in terms of obesity prevention on the condition that a methodological framework is used. There is a whole range of them including L.E.A.D and the MATCH, ANGELO, EPODE models (Greene *et al.*, 1995; Swinburn *et al.*, 1999; Matson-Koffman *et al.*, 2005; World Health Organization, 2009; Kumanyika *et al.*, 2010).

6. A multifactorial strategy

The strategy must be multifactorial including the introduction of a coordinating organisational structure which brings together the multitude of stakeholders. This structure also brings a common language shared by all (Matson-Koffman *et al.*, 2005; World Health Organization, 2009; Van Koperen, 2010).

The multifactorial strategy requires policymakers and legislators to influence the law, the use of methodological frameworks, the participation of decision-makers and politicians. The involvement of local stakeholders must take place at the policy stage and programmes must integrate existing stakeholders at a local and national level. It draws on the stakeholders, develops their potential and optimises them (Dolan *et al.*, 2010; Commission of the European Communities, 2007).

The multifactorial strategy uses different social marketing techniques (Khan *et al.*, 2009; World Health Organization, 2010). Fundraising takes place over the long term and integrates public and private funding (Dolan *et al.*, 2010). In any event, it is necessary for the techniques to be seamless and in the correct context, taking into account culture and socio-economic status.

Communication and evaluation are two other basic pillars of these initiatives. The strategy is based on evidence but also on experience. Activities are joined-up, renewable and exportable, and contribute to reducing health inequalities. Activities take place in built-up and non-built-up areas (town-planning, traffic systems, food provision) and go hand in hand with information and case studies. It concerns both general and targeted activities. Activities are multifactorial and permanent.

7. A multifactorial evaluation

Evaluation is also multifactorial. The approach is multidisciplinary, involving neuroscience, sociology, organisational science, political science, epidemiology, marketing, etc.

Evaluation takes place over the short, medium and long term. Throughout the programme it takes into account the process of implementation, involvement and the different levels to allow feedback.

Randomised comparisons are impossible on an extensive scale and in the allotted time, and make the identification of alternatives necessary.

A single evaluation variable cannot suffice in a lasting way. BMI is an important element, but not the only one. Publications in reviews of the literature very often provide little data for the implantation and monitoring of initiatives.

Complex evaluation is often neglected as they are not a priority for local stakeholders. There are problems of financial and human resources for implementing this evaluation. Initial budgets have not always taken into account the complexity of evaluation and its costs.

A balance has to be found between activities and evaluation so as not to demotivate local stakeholders and target groups.

Evaluation must be consistent when it takes place on several sites, which is an additional difficulty.

Of course evaluation must be drawn up before the implementation of the campaign, but must take into account each intermediary target: what are the expectations of scientists, politicians, local stakeholders?

Evaluation uses natural experiences to draw out the key data that is useful for building the future.

It must produce evidence based on practice. Evaluation cannot answer all questions but it is necessary to identify the fundamental markers, and differentiate them from those that are secondary (Summerbell *et al.*, 2005; Brown and Summerbell, 2009; Khan *et al.*, 2009; Kumanyika *et al.*, 2010; Van Koperen, 2010).

Another aspect of obesity prevention strategies is the **communication** and **dissemination** of experiences. Communication allows the involvement of target groups, local stakeholders, decision-makers, scientists, politicians and donors. Different channels are used: media, local and national partners, the stakeholders themselves (World Health Organization, 2009).

8. Moving towards lasting sharing of experiences at the international level

In summary, obesity prevention strategies must use a holistic approach to influence laws and regulations whilst modifying the environment and practices and proposing community-based and communication activities on the ground which draw on robust evaluation.

The entry point is policy, which itself is based on scientific fact. Methodology must be systemic with strong coordinating and multidisciplinary organisation combining cross-disciplinary soft science and hard science. The approach must be supple, flexible, changing, non-fixed and joined up.

Obesity prevention strategies require multiple partnerships that are not solely financial. Quality evaluation standards must respond to the questions put forward, and evaluation must allow feedback and optimise prevention.

We must anticipate durability through an appropriation of social norms facilitated by the holistic approach and ensure the sharing of experiences at all levels.

Multi-disciplinary research must be systematically linked.

The **big challenge** is to find a place for joined-up work between politicians, scientists, institutional bodies, economic and grassroots stakeholders, the media and the population. Experiences in all these areas must also be shared and developed at an international level.

The **EPODE EUROPEAN NETWORK** (EEN) was established to facilitate the implementation of **EPODE**-type programmes (see Chapters 2 and 3) in other European countries. The EEN conceptualises, based on EPODE pilot schemes, a transferable and lasting model to allow the development of effective community initiatives in other European countries.

It contributes to a European political willingness to promote healthy lifestyles, good eating habits and physical activity as well preventing obesity and other lifestyle-related chronic diseases.

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Chapter 2

EPODE, a methodology to prevent childhood obesity at community level

Jean-Michel Borys, Yann Le Bodo, Pierre Richard

1. Introduction

In Chapter 1 "Review of strategies to prevent childhood obesity", we saw how the need for concrete and effective prevention of overweight and obesity was now considered urgent (World Health Organization, 2004; Institute of Medicine, 2005). There are also numerous factors which, in practice, influence activity and food habits among individuals (Antipatis *et al.*, 1999; Kumanyika *et al.*, 2010). We cannot expect a unique solution to the problem of excess eating and lack of physical activity.

We can identify at least three important reasons for better prevention of childhood obesity at community level:

- the first one is the need for sustainable involvement of local stakeholders and a sustainable change in the population's practices, where many national prevention campaigns already give a great support (Kumanyika *et al.*, 2010);
- the second one is to be able to share experience at local level thanks to sustainable funds, local political endorsement and continuous monitoring and evaluation, where many initiatives are set up punctually with the support of local actors;
- the third one is to build capacity at community level in the long-term and to develop adapted tools and actions, where they already exist but remain overly confidential (Galani and Schneider, 2007; Mayer, 2009).

The EPODE methodology was developed in order to meet these needs, to bridge the gap between childhood obesity prevention awareness and practical solutions to implement the necessary related lifestyle changes in the long-term.

In 1992, Fleurbaix Laventie Ville Santé (FLVS) NGO created the Fleurbaix Laventie Ville Santé Study with the INSERM Unité 21 Research Centre and Nutrika (Protéines' Group), a company specialised in methods and social marketing (Romon *et al.,* 2009).

In 2003, based on the results of this first intervention pilot study, Protéines® (Box 2) decided to design, set up and implement an innovative methodology: EPODE (*Ensemble Prévenons l'Obésité Des Enfants / Together Let's Prevent Childhood Obesity*). Protéines® designed EPODE, consistent with the official French guidelines on nutrition, diet and physical activity (*Hercberg et al.,* 2008), with the support of FLVS-NGO, public and private partners. From January 2004 to 2007, 10 French pilot towns were involved in the programme. EPODE has since expanded to more than 500 towns worldwide.

The EPODE methodology promotes the involvement of multiple stakeholders at central level (ministries, health groups, NGOs, and private partners) and local level (political leaders, health professionals, families, teachers, local NGOs, and the local business community) (Commission of the European Communities, 2007). The methods described in this chapter have been shaped over 5 years of pilot implementation in France. The aim of the present chapter is to provide a description of the EPODE methodology and its transferability across the world (www.epode-european-network.com, accessed June 2011).

2. EPODE background

Over the past decade, several studies have demonstrated that the prevention of obesity in children is possible through community-based interventions, to improve eating and physical activity habits (Doak *et al.,* 2006, Romon *et al.,* 2009; Katan, 2009; Hercberg *et al.,* 2008; Commission of the European Communities, 2007; Butland *et al.,* 2007; De Bourdeaudhuij *et al.,* 2010). Of particular note was the FLVS study, a long-term school-based nutrition education programme. It started in 1992 in two towns in the North of France (Fleurbaix and Laventie – together about 6500 inhabitants in 1991) and consisted in community-based interventions (CBI) over the next 12 years (Romon *et al.,* 2009). A comparison population was selected from two other towns (CT) of similar demographic and socioeconomic characteristics also situated in Northern France.

Results indicates that this community based intervention programme, in fact, did reduced childhood overweight, with a substantial decrease in the prevalence (1992: 11.4% in FLVS and 12.6% in CT $p = 0.6$; 2004: 8.8% in FLVS and 17.8% in CT $p < 0.0001$).

Table 1: The evolution of overweight (including obesity) prevalence in children aged 5 to 12 in Fleurbaix and Laventie (FLVS) compared to Comparison Towns (CT) (Romon *et al.*, 2009)

	FLVS	CT	p-value
1992	11.4%	12.6%	p = 0.6
2004	8.8%	17.8%	p < 0.0001

It also appeared that interventions targeting schools only were not efficient enough and that the involvement of the whole community was necessary to reduce the prevalence of childhood obesity (Romon *et al.*, 2009). Finally, this prevention programme proved to be efficient across all socio-economic levels (Figure 1). By taking a series of coordinated societal measures, it was possible to slow down obesity and to improve children's lifestyle.

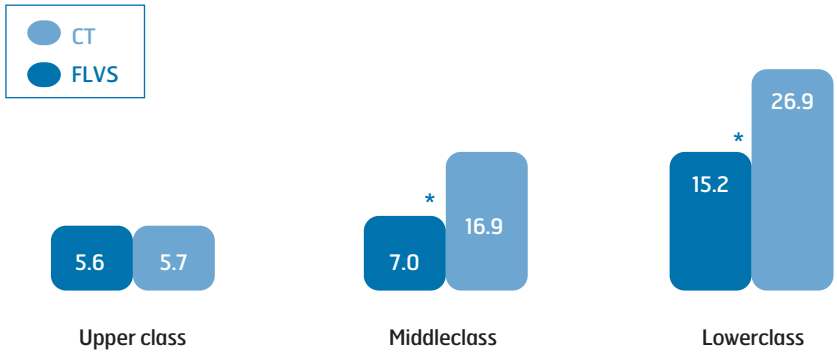

Figure 1: Obesity and Overweight Prevalence (%) according to Socioeconomic Groups in 2004, in Fleurbaix and Laventie (FLVS) compared to Comparison Towns (CT). * p-value < 0.01.

These data generated the will to up-scale the experience at national level, through an innovative methodology.

The EPODE methodology, designed by Protéines® in 2003, is based on **four main pillars** from which the EEN (EPODE European Network) pillars also originate:

- **a strong political will, thanks to the involvement of political representatives;**
- **a coordinated organisation and approach based on social marketing methods;**
- **a multi-level, multi-stakeholder approach, involving public and private partners;**

- **sound scientific background, evaluation and dissemination of the programme.**

Involvement of Political Representatives

The EPODE methodology relies on the importance of political awareness, willingness and involvement to set up and implement EPODE initiatives. The political representatives express obesity prevention issues at their level (national, regional or local) and are best positioned to initiate and support cross-sectoral prevention dynamics in communities. The political representatives can also build relationships with scientific experts, public and private partners (at national and local level) as well as with European political representatives to foster the set up and the implementation of EPODE-like CBIs in other European countries (Chapter 4 on the EEN research and recommendations on the involvement of local political representatives).

Methods and Social Marketing

EPODE is a combined and coordinated approach with the application of marketing alongside other concepts and techniques to achieve specific behavioural goals to improve health and reduce health inequalities. Social marketing messages are incorporated into strategies aimed at influencing the social and physical environments surrounding individuals. EPODE uses social marketing strategies into a multi-level and multi-stakeholder approach to ultimately reach families in their local environments (Henley and Raffin, 2010). This approach aims to mobilise local stakeholders within their daily activity (teachers, local NGOs, catering services...) to promote healthy lifestyles and greater physical activity in everyday life, empowering families and individuals in a sustainable way (Chapter 5 on the EEN research and recommendations on methods and social marketing).

Public-Private Partnerships

The EPODE methodology includes public and not-for-profit funding and support (at national and local levels) as well as corporate sponsorships. EPODE brings together the academic world, local and national politicians and representatives from the private sector, in a series of meaningful public-private partnerships. Important governance rules already exist and are reported in an EPODE commitment charter aimed at guaranteeing mutual respect of and trust for each party (§3.2.2. and Chapter 6 on the EEN research and recommendations on public-private partnerships).

Scientific Evaluation and Dissemination

The EPODE programme is evaluated following its four levels of implementation: a central organisation level, a local organisation level, action at settings level and effect at child level. Therefore the evaluation includes both a monitoring of process and outcomes indicators. The evaluation framework of the EPODE methodology is tailor-made by the central coordination team, with the expertise of a scientific

committee and feedback from EPODE local stakeholders. Among other evaluation criteria, in each EPODE town, the Body Mass Index (BMI) of children from 5 to 12 years old is regularly measured, with a high response rate (part 5 on BMI results and Chapter 7 on the EEN research and recommendations on scientific evaluation and dissemination).

From several years of implementation and dissemination across the world, **ten principles have emerged** and have shown to be essential to EPODE programmes, notably in terms of empowerment of communities by central and local coordination teams to foster healthier habits in the population (Box 1).

Box 1: EPODE ten implementation principles (Borys *et al.*, 2011)

1. Each country (or region) commits to a central coordination support/capacity.
2. Each local community has a formal political commitment for several years from the outset.
3. Each local community has a dedicated local project manager with sufficient capacity and a cross-sectoral mandate for action.
4. A multi-stakeholder approach is embedded into the central and local structures and processes.
5. The approach to action is planned and coordinated, using social marketing particularly to define a series of waves of themed messages and actions that are formed by evidence from a wide variety of sources and that are in line with official recommendations.
6. Local stakeholders are involved in the planning processes and are trusted with sufficient flexibility to adapt actions to local context.
7. The "right message" is defined for the whole community but getting the message right means tailoring for different stakeholders and audiences.
8. Messages and actions are solution-oriented and designed to motivate positive behavioural changes and do not stigmatise any culture or people.
9. Strategies and support services are sustainable and backed by policies and environmental changes.
10. Evaluation and monitoring are implemented at various levels through the collection of information on process, output and outcomes indicators and inform the future delivery of the programme.

3. The EPODE methodology

3.1. Definition and objectives

3.1.1. *Definition*

EPODE is a large-scale, coordinated, capacity-building approach for communities to implement effective and sustainable strategies to promote healthier lifestyles and prevent childhood obesity. It is aimed at reducing childhood obesity through a societal process in which local environments, childhood settings and family norms become more supportive and facilitate the adoption of healthy lifestyles in children, while enjoying healthy eating, active play and recreation.

The primary EPODE target groups are children from 0 to 12 years old and their families. Because they can initiate micro-changes within the ecological niche of children and their families through concrete initiatives fostering better eating habits and physical activity in everyday life, the local stakeholders are the other target of the programme.

The EPODE philosophy is based on:

- a positive approach with no stigmatisation of any culture or individual;
- a concrete and step-by-step learning and experience of healthy lifestyle habits;
- the tailoring of messages and actions to the targeted population (e.g. according to age, socioeconomic status);
- a sustainable implementation of the programme to enable communities to plan actions and environmental changes on the long term.

3.1.2. *Objectives*

The objective of the EPODE initiative is to contribute to the reduction of childhood overweight and obesity using a methodology that places primary prevention at the heart of each town and city's networks. The entire community becomes a channel for a health prevention strategy.

In EPODE French pilot towns (Westley, 2007), success to date has been measured by a large field mobilisation and encouraging improvements in the BMI of children.

The objectives of the EPODE methodology are based on learnings from the FLVS study and other community-based interventions. They prompt to develop a strong and sustainable network for actions, together with various stakeholders:

Input-related objectives

1. Gain the formal commitment of resources and political support from the leaders of the key organisation(s), which influence local environments and childhood settings.
2. Secure sufficient resources - including significant contribution from local organisation - to fund national support services, evaluation and local implementation.

Process-related objectives

3. Plan, coordinate, and provide the social marketing, communication and support services for community practitioners and leaders.
4. Ensure the involvement of local stakeholders in the implementation of the programme.

Output-related objectives

5. Promote a balanced, diversified, affordable and pleasant food supply and diet.
6. Encourage children and families to be less inactive and exercise on a regular basis.

Outcome-related objectives

7. Contribute to healthier behaviours of children and their family.
8. Contribute to decrease the overweight and obesity prevalence.

It is to be noted that from 2004 and until now, the EPODE methodology has been a heuristic process: it has followed continuous improvement dynamics and is still evolving.

3.2. EPODE Organisation

3.2.1. *A multi-stakeholder approach*

The EPODE methodology fosters both **top-down leadership and bottom-up mobilisation**. It promotes the **involvement of multiple stakeholders** at central level, from ministries, health groups, NGOs to private partners. The programme also benefits from the expertise and guidance of an **independent expert committee**. To put the EPODE methodology into practice, a **central coordination team**, using social marketing and organisational techniques, trains and coaches a **local project manager** appointed in each community by the mayor or other local leader able to champion the programme (Figure 2). The role of the local project manager is to mobilise a wide diversity of local stakeholders, especially in schools, pre-schools, extracurricular organisations and social networks of associations, which are key settings to implement activities with children and families.

EPODE gives each municipal department and professional sector an opportunity to be active in the programme. The methodology encourages to adapt certain professional practices, local facilities and services incorporating public health actions.

The local project manager coordinates a **local steering committee** (Figure 3) gathering local representatives such as elected representatives, heads of municipal services, school professionals, and local partners. This committee meets on a regular basis to make key decisions in order to foster the implementation of activities and actions and generate peer-to-peer dynamics.

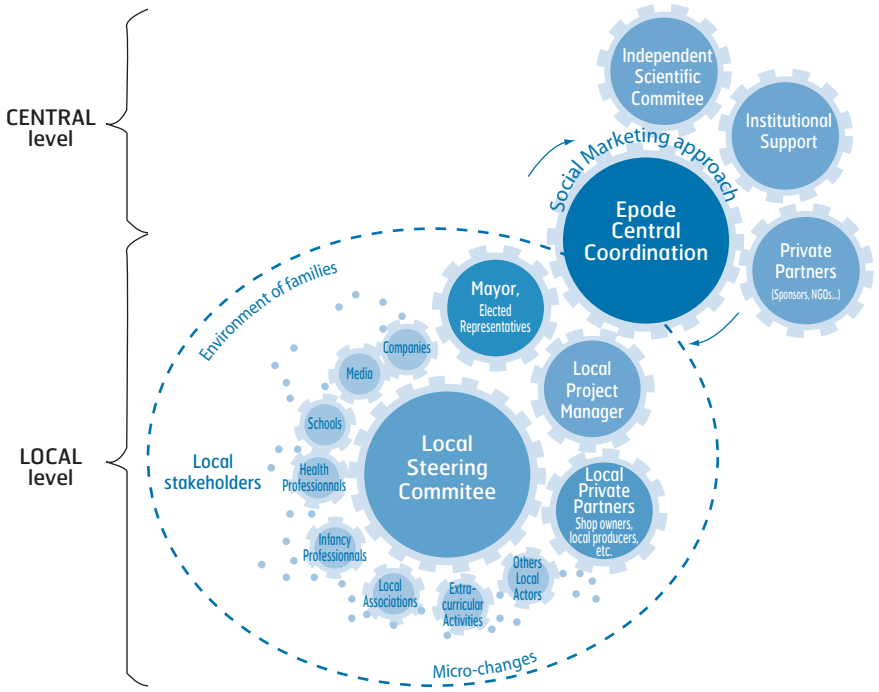

Figure 2: EPODE stakeholders at central and local levels

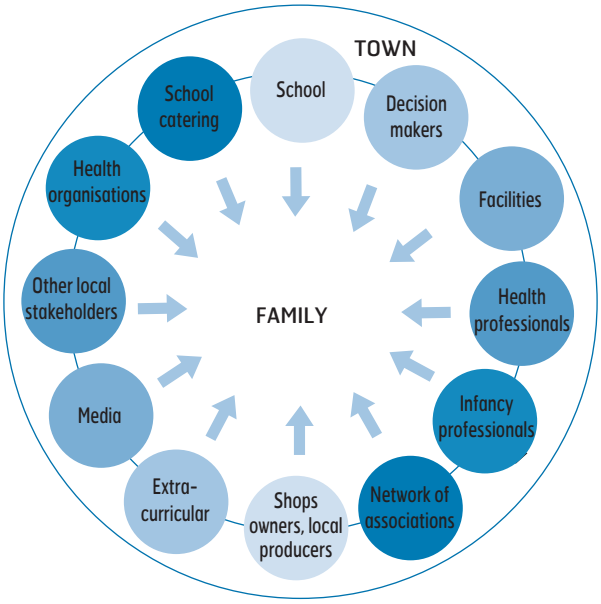

Figure 3: The categories of local stakeholders to be involved in EPODE towns

3.2.2. *Organisation at a central level*

To ensure the overall management of the programme at a central level, EPODE is coordinated by a **central coordination team** (e.g in France, from 2004 to 2010, within Protéines® agency (Box 2)). This team brings together skills applied to public health issues: social marketing, network organisation, professional training, communication with the general public and the press. It is also in charge of the programme advocacy at a central level and of the coordination of the monitoring and evaluation plan.

Box 2: Protéines®, a health communication and social marketing agency

- Founded in 1988.
- 88 persons.
- Present in France and Belgium and member of an international network of independent partner agencies based in The Hague, London, Athens, Barcelona and Montreal.
- Main activities: health strategies, network dynamics and social marketing.
- Main clients: industry (including food and beverages industry), governments (France, Belgium, Australia, Mexico...), institutions (European Commission, Agriculture and Health Ministries, National Institute for Health Prevention and Education...), and other corporate clients.

EPODE is a trademark registered by Protéines®

As the creator of the EPODE methodology, Protéines® has a "historical" competence and vast experience in large-scale CBI implementation. Protéines® created, developed and managed the EPODE programme in France from 2004 to 2010. Protéines® has also demonstrated its ability to transfer the EPODE methodology to other countries in Europe and beyond. Its far reaching international multi-stakeholder network of large-scale CBIs together with its health communication consultancy put the Protéines® Group in a best positioned interface to coordinate the EPODE European Network between 2008 and 2011, as well as further EPODE international dynamics.

Box 3: Protéines® and EPODE: the story since 1992

1992-2007

In 1992, Dr Jean-Michel BORYS and Prof. Pierre FOSSATI create the FLVS NGO to initiate The Fleurbaix Laventie Ville Santé Study (FLVS).

At the origin of the multi-stakeholder approach and concept that will be the cornerstone of this community-based intervention, Protéines® is the contracting agency for the FLVS NGO and is responsible for the implementation of the study between 1992 and 2007 (FLVS I: 1992-1997; FLVS II: 1997-2002; FLVS III: 2002-2007).

2003-2010

Protéines® is the creator of the EPODE concept in 2003, and is founder and owner of the EPODE brand.

Protéines®, with the support of FLVS NGO, public and private partners, designs, sets up and implements EPODE in 226 French towns. Since 2010, FLVS NGO has the entire responsibility of managing the EPODE programme in France with subcontractors.

2008-2011

Protéines® founds the EPODE European Network project (2008-2011) with the support of the Directorate General for Health and Consumers (DG SANCO) of the European Commission, four European Universities (Ghent, Saragossa, Lille and Amsterdam) and private partners. Protéines® is the contracting agency of DG SANCO and overall coordinator of the EEN Project, its partners and work packages.

2011

Protéines® is the agency for the Epode International Network NGO, created to answer to a global need and demand from organisations and programmes to build international capacity and capability for CBIs by sharing best practices and benefiting from the EPODE methodology. The EPODE International Network is an international project based on Public-Private Partnerships.

At the central level, the **budget distribution** is related to the diversity of activities managed by the central coordination team. The main costs are usually related to staff, while direct costs are particularly dedicated to the development of materials (website, newsletters, communications and mobilisation materials).

The central coordination team organises regular meetings with all funding parties involved at the central level. Resources may come from public, private or mixed funds. **Financial resources** should ideally be provided from the public sector so that no commercial conflicts of interest arise. However, if insufficient public funding is available, the set up of the programme should not be postponed if appropriate private funds can be mobilised (see Chapter 6 on Public-Private Partnerships). To preserve

the public health goal and prevent possible conflicts of interest, governance rules should be made clear. A **commitment charter** guarantees each body mutual respect and trust. For private sponsors, it requires no intervention in the programme contents, no association of the EPODE programme with the promotion of any product brand and limits referral to EPODE as part of a corporate social responsibility commitment when communicating on the relationship with the programme.

An element of major importance is that **central public authorities** (Ministries) and **scientific organisations** endorse the EPODE programme. And to ensure that the programme is consistent with official recommendations and policies on diet, physical activity and health, the central coordination team operates under the supervision of a **multidisciplinary committee of independent experts**. Its role is to provide an essential scientific support to the programme, especially in defining priority topics for action. They bring their expertise in paediatrics, nutrition, psychology, physical activity, marketing, sociology, health communications and educational methods.

3.2.3. *Organisation at local level*

At local level, the commitment to EPODE must come out of a **strong local political willingness** to support and launch the project. Each community that is committed to the EPODE programme signs a long-term commitment charter, in which it agrees to be involved in the programme for at least 4 to 5 years. The local political leader must therefore appoint a **councillor** as a representative of the Town Council and a **local project manager** who will be the primary contact for the central coordination team and will be in charge of the coordination of the programme at local level.

The local project manager takes responsibility for **managing the multidisciplinary local steering committee** of professionals from various fields, in order to **foster positive peer-to-peer dynamics** and **accelerate the implementation** of local actions by a wide variety of local stakeholders. He or she benefits from the political support of an elected representative of the town council, local decision maker and spokesperson for the programme. This leader takes charge of **facilitating the involvement of all municipal departments**, the **establishment of local partnerships** and the **implementation of actions**.

Each community agrees to comply with the **programme's philosophy** and **basic principles**. Local authorities ensure a significant and sustainable funding contribution for the local organisation. Notably it must ensure that a dietician and a physical activity teacher (or an activity leader with physical activity skills) are involved at various stages of the programme.

The community prints and distributes the information and communication documents supplied by the central coordination team (action sheets, general public information leaflets, posters, etc.) to the targets concerned.

The EPODE communities develop new initiatives building on the EPODE brand and are reviewed at central level to get the EPODE label.

In term of partners' visibility, the logos of all the programme's partners (institutional, scientific and financial) must appear on the information media that the town creates as part of EPODE actions, except materials targeting directly children and childhood settings.

The community must submit any proposed relationship with private players to the central coordination team for prior consent. The EPODE towns may also benefit from financial or in-kind resources from private partners to implement specific projects or activities and may also benefit from public grants awarded at federal, national, state or regional level for the implementation of local activities. This last part of the budget can vary a lot depending on the towns.

3.3. Implementation

In recent years, to promote healthier behaviours, social marketing techniques have become widespread in community-based obesity prevention programmes (Evans *et al.,* 2010; Chapter 5 on Social Marketing within the EPODE and EPODE-similar programmes). Previous reviews have shown that interventions using these techniques can achieve positive changes in risk behaviours (Evans *et al.,* 2010; French *et al.,* 2009; Henley and Raffin, 2010; Kotler and Lee, 2008; Medical Research Council, 2007). **Social marketing** offers an approach focusing on behavioural changes for target populations. Within a programme such as EPODE, it offers a 3-step approach:

- identification of the target groups and analysis of the constraints and levers for behavioural changes;
- elaboration of a strategy to reach the target groups with an holistic approach, looking for a sustainable and deeply embedded empowerment. This step requires finding out how to involve the targets and to have them share with their group an experience changing their emotional perception;
- finally, definition of a tactical process and an operational plan organised around key dimensions such as:
  - making things easy, reachable and based on a slow rhythm of apprenticeship, adapted to the specific publics. One message at a time and taking time to set up new channels to convey messages and concrete solutions,
  - repeating key messages and enabling their adaptation to the target culture and perception, which requires training and trusting local stakeholders,
  - using a multi-channel approach in order to change social reference and create a group dynamics.

The central coordination team delivers roadmaps twice a year and a dedicated toolbox to facilitate the relevant involvement of the local stakeholders.

The roadmaps are based on approaches relying on group dynamics, decision-making processes and modifications to social policies in order to go beyond awareness and to foster a deep and sustainable change in educational schemes, as far as food habits and physical activity are concerned.

For coaching and for local communication purposes, the central coordination team visits each EPODE site at least once a year. The local project managers also have continuous contact (by phone and Internet) with the central coordination team to get advice about projects, actions and communication at local level.

The central coordination team organises training sessions for the local project managers at least twice a year, based on the (bi)annual-themed campaigns or on specific subjects to be shared (e.g. public-private partners, evaluation). During these sessions, capacity-building documents are delivered to the local project managers. These meetings contribute to share knowledge and best practices, foster local dynamics, empower local stakeholders to initiate local projects and activities (thanks to roadmaps, and adaptable action sheets) and develop local communication.

Finally, an annual EPODE congress encourages experience sharing and networking.

3.4. Creating an EPODE brand

To bring visibility and a sense of ownership, it is important to create a singular brand whose features match the EPODE philosophy. It is indeed a critical component for making EPODE stakeholders feel part of a common positive initiative. It fosters group dynamics and long-term commitment. For local stakeholders, it can be a lever to legitimise their action and highlight a portfolio of initiatives under one umbrella brand. The branding of EPODE materials also facilitates recognition of the programme by "key ambassadors" and the population, creating a strong visual consistency, across all EPODE communities and within each community (Borys *et al.*, 2011).

3.5. Monitoring and Evaluation

EPODE monitoring and evaluation is implemented at 4 levels of the programme:

- at central level (e.g. assessing the endorsement of central public authorities, scientific organisations and financial partners);
- at local level (e.g. collecting the opinions of the local project managers on the themes implemented in the towns);
- in local settings (e.g. assessing the involvement of the local services in the programme);
- and child (e.g. measuring the evolution of obesity in children in the EPODE towns).

It is made through the collection of 3 types of indicators: process indicators (e.g. central partnerships, local steering committee meetings), output indicators (e.g. number of local actions, participation of families and children) and outcome indicators (e.g.

changes in dietary habits, childhood obesity prevalence) (Chapter 7). The results are reviewed at central level by the expert committee, communicated to the communities (to the local project manager, the EPODE councillor and the mayor), the partners and further disseminated through interventions in congresses and conferences, publications and the media. Each EPODE community may also communicate its own results at a local level to the members of the local steering committee and to the population via the local media.

4. EPODE international development

4.1. Communities engaged in EPODE across the world

Five years after the launch of the EPODE programme in France, 226 towns in France (**EPODE** programme), 16 in Belgium (**VIASANO** programme), 44 in Spain (**THAO Salud Infantil** programme), 14 in Greece (**PAIDEIATROFI** programme) and more recently 6 towns and a region in the Netherlands (**JOGG** programme) and 6 pilot districts in Romania (**SETS** programme) are implementing the EPODE methodology across Europe (Table 2).

Table 2: Programmes using the EPODE methodology in the world (in 2010)

Country or state	Programme acronym *(Meaning)*	Logotype	Starting year	Central coordination	Number of towns in 2010	Central resources
France	EPODE (*Together, let's prevent childhood obesity*)		2004	Fleurbaix-Laventie Ville Santé NGO	226	84% private 16% public
Belgium	VIASANO (*Healthy Life*)		2006	Protein Health Communications	16 (2007-2010)	100% private
Spain	THAO *Salud Infantil* (*Children's Health*)		2006	THAO Foundation	44	70% private 30% public
Greece	PAIDEIATROFI (*Educating Children to a balanced Nutrition*)		2008	Nostus Communications and Events	14	100% private
South Australia	OPAL *(Obesity Prevention and Lifestyle)*		2009	Government of South Australia	10	100% public
Mexico	EPODE-5Pasos *(5 steps for your health)*		2010	Government of Mexico	In progress	100% public
The Netherlands	JOGG *(Young People at a Healthy Weight)*		2010	Dutch covenant on health weight	6+1 region	60% public 40% private
Romania	SETS *(I'm living healthy, too!)*		2011	PRAIS Foundation	6 pilot districts	100% private

The EPODE methodology also raised a lot of interest outside Europe and is currently being implemented by the Government of South Australia (**OPAL** Programme) in 10 local councils and will also be implemented in Mexico in the framework of the National Plan **5 Pasos** launched by the Ministry of Health to promote healthier lifestyles and prevent chronic diseases (Table 2).

What makes the EPODE methodology duplicable in other regions, cities and towns is that the approach in the first place fosters the creation of a central coordination team with a social marketing expertise (methodology book, roadmaps, action briefing...) taking into account cultural, sociological, economic and political specificities at the local level in order to mobilise local stakeholders.

Other Countries or institutions expressing a motivation toward implementing CBI programmes using the EPODE methodology have also received the support of EEN coordinating staff or research teams on various occasions over the past 3 years (Chapters 3 and 8).

5. Significant achievements: BMI results in EPODE France and EEN

Results from the French EPODE pilot towns show a significant decrease in overweight and obesity. In the 8 French EPODE pilot towns of Asnières-sur-Seine, Beauvais, Béziers, Evreux, Meyzieu, Roubaix, Royan and Vitré, more than 23 000 children, in age groups 4-5 through to 11-12, had their height and weight measured annually between 2005 and 2009 by school health professionals (school nurses and doctors) (Romon *et al.*, 2010).

The data were first analysed globally and then the location of the schools was taken into account, i.e. whether they were in deprived or non-deprived areas.

While recent data available in France at a national level show an overall stabilisation in the prevalence of childhood overweight and obesity (AFSSA, 2007; DREES, 2010), results from the French EPODE pilot towns show a significant decrease in overweight and obesity: 9.12% between the years 2005 and 2009, i.e. a reduction from 20.6% in 2005 to 18.8% in 2009 ($p < 0.0001$). The prevalence of overweight decreased from 15.8% in 2005 to 14.4% in 2009 ($p < 0.0001$) and the prevalence of obesity decreased from 4.8% in 2005 to 4.4% in 2009 ($p = 0.056$). The results are summarised below (IOTF obesity and overweight cut-offs points):

Table 3: Evolution of the prevalence of childhood overweight and obesity between 2005 and 2009 in 8 EPODE pilot towns, among low- and non low-Socio Economical Status Areas (SES). NS : non-significant.

	Total population			Non-Low SES Area			Low SES Area		
	2005	2009	p	2005	2009	p	2005	2009	p
Sample size	24752	23617		15286	14762		9466	8855	
Refusal (%)	2.7	5.8		2.27	5.86		3.38	5.82	
Obesity (%)	4.81	445	NS	3.6	3.22	NS	6.78	6.5	NS
Overweight (%)	15.76	14.48	< 0.0001	15.04	13.03	< 0.0001	16.91	16.65	NS
Overweight including obesity (%)	20.57	18.83	< 0.0001	18.64	16.24	< 0.0001	23.7	23.15	NS

What has become apparent from recent French national-level data, however, is the difference indicated in the varying socio-demographic characteristics of families, with children from disadvantaged households showing an increase in the prevalence of overweight and obesity (AFSSA, 2007). Interestingly, an encouraging development in EPODE pilot towns indicates that children who attend schools located in deprived areas, rather than showing an increase in the prevalence of overweight and obesity as shown at national level, instead show a downward trend of 2% (non-significant, p = 0.3845) in the prevalence of childhood overweight (including obesity): from 23.7% in 2005 to 23.1% in 2009.

Without establishing a direct cause-and-effect relationship, the results of these eight EPODE pilot towns demonstrate an encouraging overall decrease in childhood overweight and obesity. This gives further indication of the necessity to continue the development and application of EPODE methodology in countries at local and national level, so that the growing health problem of overweight and obesity in children can continue to be addressed.

It has become apparent from the data collected that from the earliest age, continued action in the prevention of the development of overweight and obesity in children is essential. Similarly, with children where the prevalence of overweight and obesity remains high in less advantaged populations, action targeting this particular group remains a priority.

To go further into existing EPODE practices *based on its 4 pillars* ***and systematise the conceptualisation of the methodology****, in 2007 Protéines® submitted a project to the Directorate General for Health and Consumers in the European Public Health Programme (2003-2008) framework calling for proposals. Granted in June 2008[1], the project saw the co-creation of the EEN undertaken thanks to the support of DG SANCO, its General Director, and private sponsors.*

The ***EPODE European Network*** *was developed by Protéines® in 2008, with the support of 4 European Universities. The EEN objective has been to facilitate the implementation of EPODE and similar CBIs in other European countries, regions and towns, through a mix of applied research, consultation and dissemination activities.*

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Chapter 3

The EPODE European Network

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This chapter provides a global description of the EPODE European Network project (2008-2011), its objectives, organisation, partners and activities, and introduces the research questions and recommendations that will be addressed in Chapters 4 to 7, as well as EEN expected outcomes further presented in Chapters 8 and 9.

1. From EPODE to the EPODE European Network

Over the last twenty years, studies have demonstrated that the prevention of overweight and obesity is possible through multi-stakeholder and multi-level interventions targeting lifestyles, in particular diet and physical activity-related environments and behaviours (WHO, 2009). Increasing evidence shows that the most successful interventions are multicomponent, adapted to the local context, using the existing local structures of a community, and involving the participants in the planning and implementation stages. However, there are still gaps to be bridged between awareness, research and practical know-how. Concrete ways to ensure sustainability of interventions in real-life settings and effectively implement the necessary related lifestyle changes are still to be elaborated (WHO, 2009).

From encouraging results obtained in a previous long-term pilot study, the EPODE methodology was developed in 2003 by Proteines®[1] (Borys, 2011).

From ten French pilot towns engaged in 2004, the EPODE programme was scaled-up in 2007 to other communities in France and was also adapted for use in Belgium and Spanish pilot communities, starting the VIASANO and THAO programmes respectively. In 2007, the EPODE methodology was also recognised as an innovative example of a community project aimed at promoting healthy behaviours in children (Commission of the European Communities, 2007). At this stage, the sustainability and transferability of the EPODE approach raised interest among political and institutional bodies and scientific experts (Watson, 2007; Katan, 2009), as did the encouraging downward trend in the prevalence of childhood overweight experienced by the pilot communities in France (Summerbell *et al.*, 2009; Romon *et al.*, 2010). Different organisations in Europe have expressed the will to support the development of EPODE-like programmes.

To facilitate such deployment, a deeper insight into existing EPODE practices and know-how and a more systematised conceptualisation of the methodology was planned as was an effective dissemination strategy to better inform interested political representatives, local authorities and stakeholders, institutions, scientific experts and public health organisations at European level.

In this regard, with the contribution of European university teams (Ghent University, Saragossa University, Lille 2 University and the Free University of Amsterdam), in 2007 Protéines® submitted a project to the Directorate General for Health and Consumers in the framework of the European Public Health Programme (2003-2008) call for proposals. Granted in June 2008[2], the project saw the co-creation of the EPODE European Network (EEN) undertaken thanks to the support of DG SANCO, its general director, and private sponsors.

From 2008, the overall objective of the EEN has been to **facilitate the implementation of large-scale community-based interventions (CBIs) using the EPODE methodology in other European countries, regions and communities**. To favour a consistent dissemination of EPODE and similar programmes, EEN's core objective has been to provide a **deeper conceptualisation of the EPODE methodology** on its **four pillars**: political commitment, methods and social marketing, public-private partnerships and scientific evaluation and dissemination. Applied research activities were designed in order to combine evidence from a wide variety of sources such as the literature, official recommendations, ad-hoc formative research and practice-based evidence from first EPODE experiences in France, Spain and Belgium.

1. See Chapter 2, box 2.
2. Grant agreement 2007327.

As such, the EEN project fit well into the Strategy for Europe on Nutrition, Overweight and Obesity-related health issues (EU White Paper, 2007), prompting an "*integrated EU approach to contribute to reducing ill health due to poor nutrition, overweight and obesity*", including cross-sectoral action and the civil society, academics, private actors (including the food industry) and local stakeholders in public-private approaches.

2. The EPODE European Network

2.1. EEN Objectives

The EPODE European Network (EEN) was designed to facilitate the implementation of CBI programmes using the EPODE methodology in other European countries. Three specific objectives were put forward:

1. **Raise political, institutional and scientific awareness** of the relevancy of local, long-term and multi-stakeholder approaches to prevent childhood obesity. The encouragement of relevant stakeholders - i.e. political representatives, local and regional structures, national public health agencies, private actors - to commit themselves to implementing effective strategies similar to EPODE across Europe, was particularly targeted.

2. **Enrich the existing EPODE methodology and deliver concrete recommendations**, to be transferable to the organisations willing to deploy a programme based on the EPODE methodology. The EEN could therefore be considered as a "think and do tank" gathering multiple contributions (experts from various fields, political and institutional representatives, public health professionals, programme coordinators) aimed at discussing, under the leadership of four associated university teams, the four pillars of the EPODE methods:
   - the importance of political awareness, commitment and involvement;
   - the interest of coordinated and social marketing approaches;
   - the legal and ethical framework of public-private partnerships;
   - good practices for monitoring, evaluation and dissemination.

3. **Facilitate the dissemination** of EPODE and similar large large-scale community-based interventions in other European countries, regions and towns.

2.2. EEN Partners

2.2.1. *Proteines®*

Protéines®, which developed the EPODE methodology in 2003, also developed the EEN project and ensured its overall management and coordination via a dedicated coordinating team. This team was also in charge of dissemination activities. As an associated partner, the Fleurbaix Laventie Ville Santé association assisted the EEN Coordinating Team in the administrative management of the project.

2.2.2. *European Commission*

The EEN project was granted by the European Commission (Directorate General for Health and Consumers) under the EU Public Health Programme 2003-2008 (Grant Agreement 2007327). The implementation of this project is supported by the EU Executive Agency for Health and Consumers (EAHC).

2.2.3. *Four European universities and collaborating partners*

Four European universities worked throughout the three years of the project to lead applied research activities aimed at enriching the EPODE methodology: The Free University of Amsterdam (The Netherlands), Ghent University (Belgium), Saragossa University (Spain) and Lille 2 University (France). Four research areas were managed by these associated universities with the contribution of collaborating partners and invited experts bringing multi-disciplinary expertise in local politics, evaluation sciences, food and physical activity-related behaviours, sociology, psychology, social marketing, health communication and public-private collaborations.

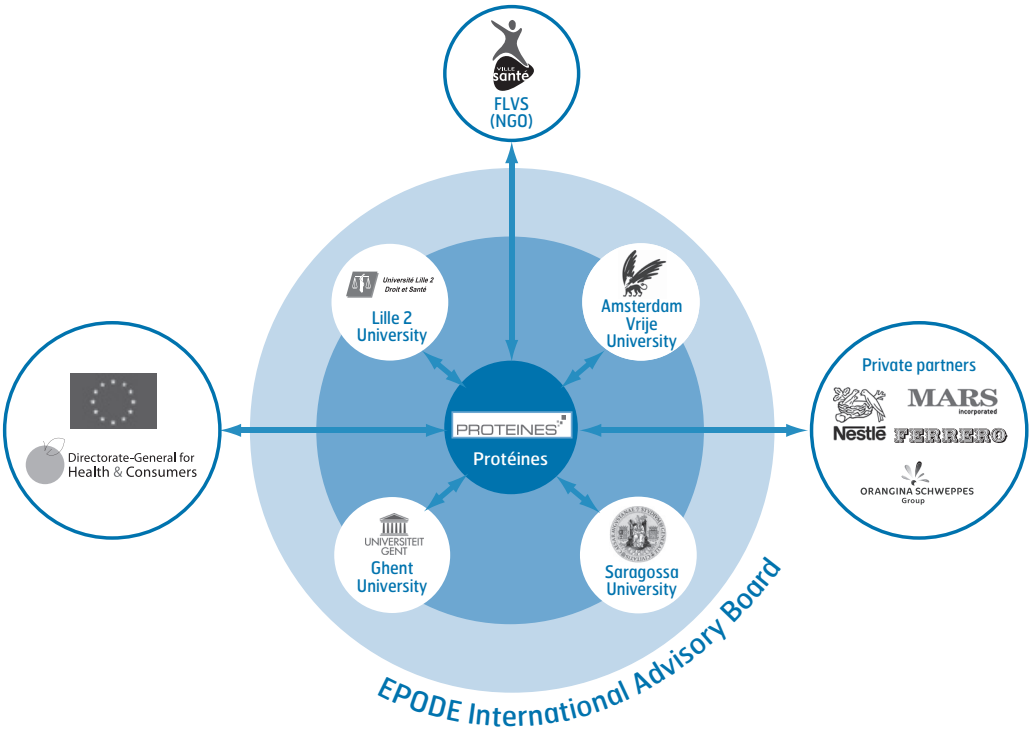

Figure 1: the EPODE European Network stakeholders

2.2.4. *Private partners*

As part of their corporate social responsibility commitments, four private partners, Ferrero®, Mars®, Nestlé® and Orangina Schweppes® have decided to support the project. These companies provided financial resources for the project and participated in committee meetings specifically related to the 4th EEN research area, i.e. public-private partnerships. The corporate partners were committed to following clear rules of engagement, including limitations on the use of the EEN and EPODE logos and images. Their statement in support of the EEN project is presented in Annex 2.

2.3. EEN organisation and methods

Managed by the EEN **Coordinating Team**, the EEN was structured around an EEN **Board**, four **committees** and the EPODE **International Advisory Board**. Each committee, led by one of the associated university teams, was used as a **platform welcoming external contributions** to explore the 4 different EEN research areas.

The committee for the Involvement of Political Representatives was chaired by Professor Stefaan De Henauw of Ghent University, Belgium. This committee was in charge of developing recommendations regarding the required political involvement in the support of local, long-term and multi-stakeholder approaches in the field of obesity and non-communicable disease prevention. Dr Jo van Assche was the principal researcher of the committee.

The **Committee for Scientific Monitoring, Evaluation and Dissemination**, chaired by Professor Jaap C. Seidell and Dr. Tommy L.S. Visscher of the Free University of Amsterdam, mapped, reviewed and analysed the existing evaluation schemes applied to childhood obesity prevention CBIs in order to enrich the evaluation process implemented in the EPODE methodology. Dr Marije van Koperen was the principal researcher of the committee.

The **Methods and Social Marketing Committee** conceptualised how network dynamics and social marketing approaches could better tackle childhood obesity, particularly as an important component of the EPODE methodology. Professor Luis A. Moreno from the University of Saragossa in Spain, chaired this committee. Dr. German Vicente-Rodriguez and Luis Gracia-Marco were the principal researchers.

The **Public-Private Partnerships Committee**, chaired by Professor Monique Romon of Lille 2 University, France, focused on public and private partnerships (PPP) in the field of obesity prevention CBIs, including the ethical, legal and technical aspects. The committee was in charge of elaborating recommendations from existing EPODE practices, to be adopted by relevant stakeholders to be involved in an EPODE PPP. Dr. Thomas Alam was the principal researcher.

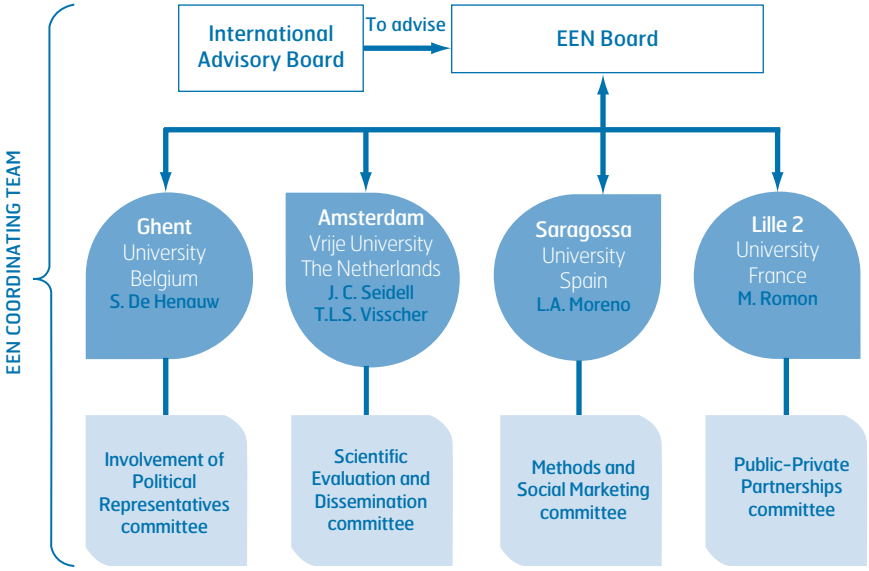

Figure 2: EPODE European Network organisational scheme

2.4. EEN activities

2.4.1. *Applied research activities*

The activities, focused on the **research areas** introduced above, followed a work plan comprised of literature screening, qualitative research and dissemination of results. This research was based on a broad consultation of stakeholders representing programmes directly inspired by EPODE throughout Europe and others participating in similar initiatives, such as national or local programme coordinators, experts, sponsors etc. The work-in-progress was regularly enriched and discussed within **committee meetings and workshops** (twice a year) which gathered the coordinating team, the leading university team and invited experts, political and public health representatives[3]. Other initiatives and case studies were also presented to enrich discussion and share experiences. The conclusions of this work are broadly detailed in Chapters 4 to 7 of this book.

Board meetings gathering the Coordinating team, the European Commission (DG Health and Consumers), the associated universities and the EEN private partners[4] took place annually to validate the work in progress.

The EPODE International Advisory Board[5] also gave a critical view on EEN activities beyond its usual role in the critical appraisal of EPODE existing data and evaluation schemes at the international scale.

3. See Ackowledgement p. 245.
4. *Ibid.*
5. *Ibid.*

2.4.2. *Dissemination*

A continuous **communication** on the work-in-progress and the project as a whole was ensured through interventions in international congresses and conferences, publications in peer reviewed journals, a dedicated website and newsletters. Two symposiums were also organised over the course of the three-year project in order to share the outputs of the four EEN committees.

Countries or institutions expressing a desire to implement a large-scale childhood obesity prevention CBI using the EPODE methodology have also received the support of the EEN coordinating staff or the research teams at various occasions over the last three years. Chapter 8 of this book provides an overview of the programmes whose representatives have had the opportunity to learn from and share experiences with the EPODE European Network. These collaborations have been the opportunity to organise **on-site visits** and **joint meetings** to raise awareness among local decision makers, experts and public health professionals and to advocate for the set-up of large-scale community-based interventions to prevent childhood obesity.

2.4.3. *Evaluation*

Beyond monitoring of all the activities and reporting to the Executive Agency for Health and Consumers, an **external review** on the advancement of the work and on the level of achievement of the project's objectives was conducted twice (Thomason, 2010, see intermediary conclusions in Annex 1).

2.5. EEN expected outcomes

Recommendations to be used for the sustainable implementation of EPODE-similar programmes in other European countries (reported in this book, Chapters 4 to 7) are considered to be the main output of the project.

Nonetheless, the EEN also aimed to foster the set-up and implementation by relevant teams (who could be led by universities, private stakeholders, national or local governments…) of programmes based on or inspired by the EPODE methodology. Since the beginning of EEN, the EPODE methodology has been deployed in France (226 communities[6]), Belgium (7 communities[7]), Spain (44 communities[8]) and has been used in several other European programmes. **PAIDEIATROFI** was developed in Greece in 2008 (13 communities[9]) and programmes such as the **Healthy Weight Communities**[10] in Scotland (2009), the **JOGG** initiative[11] in the Netherlands (2010) and the national movement **SETS**[12] in Romania (2011), have also been inspired by

6 www.epode.org
7. www.viasano.be
8. www.thaoweb.com
9. www.paideiatrofi.org
10. www.healthyweightcommunities.org.uk
11. www.jongerenopgezondgewicht.nl
12. www.sets.ro

EPODE. Beyond Europe, the EPODE methodology has become an important component of the governmental public health programmes developed in South Australia (**OPAL**[13], 2009) and Mexico (**5 Pasos**[14], 2009) to increase healthy eating and physical activity habits among the populations. This European and international development is further detailed in Chapters 8 and 9 of the book.

3. EEN Research Questions

EEN research questions were elaborated in each area based on the advancements and challenges faced by the implementation of the EPODE programmes (see Chapter 2), the priorities raised in the EU public health programme and the international recommendations pushing for organised large-scale multi-stakeholder and multi-level interventions in the prevention of childhood obesity (EEN Grant agreement, 2007).

3.1. Involvement of Political Representatives (IPR)

Various national or local governmental interventions can be considered as having a public interest in influencing behaviours, whether targeting individuals or different populations and the environments in which they live. Beyond the central role of national governments in leading policies and action plans to prevent obesity, WHO (2007, p. 244) also recognises the role that regional and local governments can play e.g. through their mandates in "*controlling urban development and planning, adopting standards for healthy cities, managing school and school catering standards, using group purchasing power to support local markets that sustain agriculture and horticulture, and setting local economic priorities*".

More concretely, the Institute of Medicine conducted a study (Parker *et al.,* IOM, 2009) on the potential effective actions of local governments to prevent childhood obesity. Local officials (mayors or other local political leaders) are presented in a critical position to **make a decision** and **take action** through the involvement of multiple services (public health and safety, social affairs, public works, transportation, parks and recreation). The assessment of **what has been done** (correcting action and disseminating results), **what is needed** (setting priorities), **what works** or does not and at what cost (guiding decision) appears to be an essential aspect of the role that local authorities can play. As Parker *et al.* put it (Parker *et al.,* IOM, 2009, p.2), "*These officials may find themselves uniquely positioned to catalyse, support, or lead collaborations in the community and engage diverse constituent groups in efforts to improve the places where children live and play*". But it appears that there is still much to be learned about conditions and methods prompting local authorities to exercise this position.

13. www.opal.sa.gov.au
14. www.5pasos.mx

In this regard, EPODE places the intervention at the heart of the community, and as such, relies considerably on a concentrated and **long-term commitment** of local authorities in setting up and implementing sustainable local coordinated initiatives. Nonetheless, common sense suggests that many determinants actually condition this local commitment and organisation. Among other political barriers, an important hurdle could be the **interval between interventions and observed impacts** in obesity prevalence, which may cause hesitancy in engaging resources, especially during difficult economic periods. To better understand the role of local authorities in the organisation of community-based interventions aimed at preventing childhood obesity, some of the research questions raised as part of the EEN were:

- the **role of local government** in community interventions concerning obesity prevention;
- the barriers and levers for an effective **political commitment and leadership** in childhood obesity prevention at community level;
- the configuration of the **local organisation** in favouring a sustainable and multi-stakeholder approach to preventing childhood obesity;
- the **role of intermediary actors** (e.g. local health promotion services, municipal school catering, local associations etc.) in the implementation of interventions at the community level.

3.2. Methods and Social Marketing (MSM)

As illustrated in the different mappings of the determinants of obesity at population level (Kumanyika *et al.*, 2002; Butland *et al.*, 2007), determinants of conscious and unconscious behaviours lay in a complex system involving different levels, different sectors, and for a great extent can be beyond individual control.

In line with other international recommendations (WHO, 2007), the OECD (2010, p.234) stresses the need for "*comprehensive strategies involving multiple interventions to address a range of determinants to reach a 'critical mass' – one that can have a meaningful impact on the obesity epidemic by generating a fundamental change in social norms*". And when considering which **methods** work, the OECD (2010, p.21) emphasises several "key drivers of success" for preventive interventions:

- high participation (in supply and demand);
- long-term sustainability of effects;
- ability to generate social multiplier effects, e.g. through the involvement of stakeholders in "different forms of dialogue and partnerships" and "effective channels of communication stakeholders";
- combination of multiple interventions (focused on both diet and physical activity) producing their effects over different time horizons.

From this perspective, community-based interventions (CBIs) appear to be a high-potential pathway to reach a significant proportion of the population while offering

the possibility of tailoring communication action locally according to cultural, social and physical environments (Hawkins, 2008). CBIs also simplify cross-sectoral mobilisation of stakeholders. Parker *et al.* (IOM, 2009) highlight a wide diversity of local actions that are potentially effective in the areas of community planning, transportation, food and physical activity offer and distribution, participation to federal/national/local government action, nutrition assistance programmes, media and social marketing campaigns.

Cleary identifying which interventions have the best effect on food behaviours remains a challenge (see Chapter 5) and a recent French collective survey reviewed the different categories and characteristics of such interventions (INRA, 2010). Some actions are focused on individuals or populations (e.g. information campaigns, education programmes). Other actions are focused on their environment (e.g. food and physical activity offer, pricing and food labelling policies, regulation on food composition and marketing practices). As a systematic application of marketing alongside other concepts and techniques to achieve specific behavioural goals to improve health and reduce health inequalities, EPODE and other **health-related social marketing interventions** (defined by French and Blair-Stevens, 2007), can be positioned in-between, as combined approaches. In this respect, EPODE may be promising in the integration of a significant diversity of efforts. When considering specifically obesity prevention, this combined approach is also described by Douglas *et al.* (2010) as an **ecological approach** to nutrition and physical activity promotion in CBIs, where among other aspects, social marketing messages can be incorporated into strategies aimed at influencing the social and physical environments surrounding individuals. Although promising, Douglas *et al.* also underline that the relationship between ecological approaches and social marketing in obesity prevention CBIs has not yet been "systematically explored" and provides interesting reflections and research tracks in this respect.

EPODE methods actually tend towards those directions, **incorporating social marketing strategies into a multi-level and multi-stakeholder approach** to ultimately reach families in their local environments (Henley and Raffin, 2010). With the objectives to better conceptualise and increase the generalisability of these methods, the EPODE European Network addressed the following research questions:

- the ways to identify **priority topics** for action and **priority target groups**;
- the **methods** to be preferred in EPODE **planning**, **strategies** and **implementation**;
- the exploration of **social marketing approaches** and techniques applied to community-based interventions (especially in the field of obesity prevention);
- the factors favouring **long-term group dynamics** at central and local levels in EPODE programmes.

3.3. Public-Private Partnerships (PPPs)

Multi-stakeholder approaches are widely recognised to be necessary in order to tackle obesity epidemics on a large scale (EU white paper, WHO charter, 2007). This implies raising the following important questions: **stakeholder** legitimacy and involvement, the **cooperation process,** and the necessity for an **interface role** between the stakeholders. The World Health Organization reminds us that **governance principles** have to be defined in order to prevent conflict between the development of a public policy and the interest of industries, and to encourage the private sector to make positive contributions (WHO, 2007, p.245). The World Research Cancer Funds, which proposes that a "*new balance be struck in favour of health*", even highlights that beyond the absence of coinciding interests between (1) industry driven by duties to shareholders, employees and consumers and (2) public health interest, there must be a "*scope of imaginative policies and actions mutually reinforcing and designed to improve public health and specifically to prevent cancer and other diseases, and also to be the basis of profitable industries*" (WRCF, 2009, p.130). The development of adapted public-private partnerships is therefore a challenge, and as Dr. Sassi explains (OECD, 2010, p.22), "*the interests of different groups are sometimes in conflict with each other and it is not always possible to find a solution where nobody loses out*". Recognising meanwhile that no party can tackle the problem alone, joint efforts and cooperation are necessary to meet the challenge.

Among other organisations, the OECD (2010, p.159) has highlighted the potential effects of a broad range of private nutrition and physical activity initiatives in the area of "*health promoting production, marketing and human resources management policies*" (e.g. development of health promotion programmes in the workplace, production of physical activity-friendly urban design solutions, reformulation of the food offer, help to consumers to tend towards a healthy and balanced diet, responsible marketing and advertising practices, development of medical solutions contributing to the treatment of overweight and obesity). The private sector may also invest, as part of their corporate social responsibility commitment, in **health promotion programmes** thereby addressing societal expectations. This includes contributions to health education initiatives aimed at promoting healthier lifestyles. Nonetheless, few recommendations exist about the ways to concretely initiate and manage such commitments in cooperation with the public sector. The World Health Organization considers that PPPs for health are diverse and vary depending on participants, legal status, governance, management, policy setting prerogatives, contributions and operational roles (WHO, 2010). Frameworks exist to assess the compatibility of PPP to prevent childhood obesity, questioning for instance the company's mission and vision, resources and necessary management skills, acceptability by the workforce and target markets, compatibility of partners as regards organisational values, resource mobilisation and perception of success (Kraak, 2010). Guidelines have also been developed by organisations such as the Oxford Health Alliance (2008) to favour

common ground where market forces can be mobilised in an appropriate manner (including maximising transparency and avoiding conflict of interest) to contribute to the achievement of a public health objective. Public-private collaborations are also considered to be more likely to increase the scope of financial and human resources that could be mobilised to serve public health programmes' objectives in an appropriate manner (OECD, 2010).

The case of EPODE programmes (see also Chapter 2), which may include public and non-for-profit funding and support (at national and local level) as well as corporate sponsorships, appears to be innovative. And while important governance rules already exist and are reported in an EPODE commitment charter aimed at guaranteeing mutual respect of and trust for each party (see Chapter 2), the EEN project was a unique opportunity to introduce open discussions aimed at enriching the management of EPODE public-private partnerships and to explore in particular different research questions:

- the **diversity of existing PPPs** in the field of public health in general and community-based interventions applied to obesity prevention in particular;
- the **favourable** and **unfavourable conditions** for the **establishment and sustainable management** of relevant PPPs in the framework of the EPODE methodology;
- the **recommendations** and **ethical charter** to be followed when involving interested public and private partners/sponsors in the framework of Epode and similar initiatives.

3.4. Scientific Evaluation and Dissemination (SED)

While it is still difficult to identify individual and cumulative effects of CBI components in preventing childhood obesity, Doak *et al.* (2006) have proposed several recommendations to implement and evaluate large scale interventions, based on programmes that have shown to be effective.

As Jansen *et al.* state (2010, p.187), policy, practice and research consider the purpose of evaluation differently, with complementary views encompassing all the aspects of evaluation to be taken into account but each one presenting different objectives to be achieved. (1) In **practice**, the feasibility of the intervention within given timeframes and resources is essential. The acceptability of the activities by primary target groups (e.g. in EPODE, children and families) and intermediary target groups (e.g. in EPODE, a broad diversity of local stakeholders) as well as the prevention of any side effects related to the intervention are also very important. (2) **Policy makers** give more attention to the effectiveness of intervention programmes, especially based on the final health outcomes achieved (e.g. childhood obesity prevalence evolution). As funders, they are particularly concerned about the legitimacy, accountability, internal validity (i.e. possibility to attribute results to the programme) and cost effectiveness of the

intervention. (3) Finally in the **research** area, more emphasis is put on the achievements of programme objectives to assess the programme's efficiency, particularly as regards final outcomes (e.g. behaviour changes and obesity prevalence).

Integrating these different dimensions, Jansen *et al.* (2010, p.189) raise "golden evaluation questions" to be addressed for process and effect evaluation: (1) programme reach, acceptance and integrity (i.e. was the programme carried out as planned?) (2) Observed change (did this include undesirable results?) (3) internal validity (4) effect explanation (5) cost-benefit assessment (6) applicability (7) generalisability (external validity). When considering large-scale public health interventions to counteract obesity in children, some other important criteria emphasised by WHO (2007, charter, p.252) also have to be taken into account such as ''simplicity" (reasonable number of stakeholders involved, time spent and budget for data collection), "data quality" (representative, valid and sensitive) and "data acceptability" (people and organisations' willingness to participate in a surveillance system).

Nonetheless, addressing all these questions in a large-scale community-based intervention is a challenge, especially in demonstrating the specific difference made by the intervention which remains extremely complex and requires sustained effort.

As a multi-stakeholder approach, EPODE evaluation should focus on **collaboration processes** that can indeed be considered critical in initiating organisational changes and consequently social changes. This requires evaluation resources to be mobilised at all levels. EPODE, as a large-scale community-based initiative, therefore calls for a **multi-disciplinary and participative evaluation** approach (Jansen *et al.*, p.181, 2010).

From this perspective, Zimmerman and Healey (2010, p.90) also advocate that "*more attention [be] paid not only to programme outcomes but also to the process of programme implementation*" should allow us to better "know what we do", identify success and failure at all stages of implementation and incrementally take corrective actions over time. The WHO framework to monitor and evaluate implementation of programmes targeting population-based behaviour changes also highlights the importance of establishing clear programme objectives and relying on specific process, output and outcome indicators (core and optional) to monitor progress with respect to those objectives (WHO, 2008).

Building on EPODE existing multi-level evaluation practices (see Chapter 2), the objectives of the EEN research on "scientific evaluation and dissemination" were to better conceptualise the EPODE implementation processes and to elaborate a multi-level evaluation framework that would make a separate monitoring of inputs, process, outputs and outcomes possible over the course of programme. Research issues encompassed:

- the description of an **EPODE logic model** as a large-scale community-based intervention for the prevention of childhood obesity;
- the optimisation of the **EPODE multi-level and multi-stakeholder evaluation framework** using the latest insights on community intervention evaluations;
- the most **adequate method to measure** children (weight/height) in order to assess Body Mass Index (BMI), without stigmatising the operation, and to convince parents about the participation of their children in the measurements without "distressing" them;
- the conditions favouring an appropriate **dissemination** of EPODE results.

Thanks to the involvement of the 4 associated universities, the EEN has been the opportunity to document and conceptualise EPODE practices related to the 4 important pillars of the methodology: involvement of political representatives, coordination and social marketing, monitoring and evaluation and public-private partnerships. This was carried out from 2008 to 2011 through a broad range of published and unpublished literature screening, more than 75 interviews with an important diversity of stakeholders, and 15 workshops counting on more than 100 multi-disciplinary contributions. The highlights of the EEN project have been presented to more than 300 delegates from 25 countries attending the EEN symposiums in 2009 and 2011.

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Part 2

Recommendations to implement large scale community-based interventions using the EPODE methodology: from research to practice

Chapter 4

The role of local authorities

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Introduction to the overall EEN project

The EEN project examines the effectiveness of community-based interventions for childhood obesity prevention. According to the **contingency theory**, the effectiveness of an intervention or programme depends on the characteristics of the programme on the one hand and on several factors in the environment or context in which the intervention or programme is implemented on the other hand (Lammers *et al.*, 2000). Hence, three parts of the EEN research relate to the characteristics of the community-based interventions for childhood obesity prevention, that is (1) the nature of the social marketing models on which the programmes are based, (2) the

nature of the cooperation between the authorities and private companies, and (3) the approach of the evaluation and monitoring of the programmes or community-based interventions. A fourth part of the EEN research relates to the context in which such an intervention or programme is implemented, and more specifically to the role of local governments.

According to a recent OECD obesity prevention report, there is a consensus about the fact that "community-based interventions with multiple components, and the participation of multiple stakeholders" obtain the highest effectiveness score to handle obesity prevention (Sassi, 2010). From the EEN case studies in two Flemish cities – mentioned as "city A" and "city B" – we have also gathered information on the **nature of the interventions** for promoting healthy food and sufficient physical activity. This information showed that in city A obesity prevention is handled by carrying out projects. Conversations with key people from this city made it clear that the town council particularly responded to the offer of projects and campaigns coming from higher public authorities or private organisations. In the past, the projects or actions were of a rather *ad hoc* nature and lacked a necessary form of coherence. The question is whether the recent health policy plan will alter this in the future. In city B, we diagnosed a rather incoherent approach of obesity prevention, which, like in city A, was based on isolated projects. Since 2007, this has changed, owing to the cooperation with Viasano Belgium. The format of a Spring action (on healthy food) and an Autumn action (on sufficient physical activity) brought order and thematic coherence to the obesity prevention projects in city B. Moreover, the Viasano logo was meant to boost recognisability. All the same, there were also a lot of questions concerning the surplus value of the cooperation model. Most questions related to whether there was enough creative thinking to transform topics (for the Spring and Autumn actions) into effective and easily implementable complementary components in order to make the inhabitants of city B change their behaviour.

1. Objectives and methods

1.1. Objectives

In the EEN project the Department of Public Health, in collaboration with the Department of Political Science of Ghent University, is doing research on the *role of local governments* in community interventions concerning obesity prevention. Based on literature data the hypothesis was raised that a local authority should engage in assuming leadership in the promotion of diet, physical activity and healthy lifestyles to effectively reach the target on sustainable changes in relevant behavioural patterns. This hypothesis is tested by means of two case studies about the leading role Flemish city authorities play in the promotion of diet, physical activity and healthy lifestyles.

1.2. Selection of two Flemish cities for the case studies

In order to get a reliable picture of the leadership exerted by local governments in Flanders (northern, Dutch-speaking part of Belgium) in implementing community interventions concerning obesity prevention, it was found to be necessary to decide in favour of a research approach with one or more case studies, as there are no scientifically gathered data on the matter as of yet and consequently there are no academic sources. The selection of the case studies in which the hypothesis was tested comprised a pre-study. This exploratory pre-study focused on large Flemish cities with a marked regional function for the surrounding urban region since the functioning of a local government is largely determined by the scale of the town or municipality concerned (Van Hecke and Van der Haegen, 1997). For this exploratory research, the Logos (Flemish decentralised services for local health consultation) were questioned about their relations with the local governments (town council and social services department) in these cities.

On the basis of this exploratory research, **city A and city B were selected as case studies** since they were the most interesting for a more in-depth study. City A and city B are neighbouring cities in Flanders and are almost the same size. In 2007 city A has about 60 000 inhabitants and city B about 70 000. More specifically, in both cities structural work is being done concerning obesity prevention (in general, but also aimed at children in particular). In these two cities, there are also extensive networks actively working on health promotion in general and on healthy diet and sufficient physical activity in particular. Moreover, within these networks a larger diversity of actors was observed in comparison with the other cities. Furthermore, it is also important to mention that both cities have institutionally the same immediate context, because they are both supported by the same Logo in the way they are dealing with obesity and/or health promotion centred on diet and physical activity. On the other hand, there seems to be an important administrative difference: in city B the town council appears to take the initiative in this matter, whereas in city A, the social services department, known as the OCMW is the most active actor. This difference concerning the local steering role was taken into account in the research into the institutional factors that determine the leading role of local governments in obesity prevention projects. Finally, both cities have considerable societal differences, which, among other things, is shown by the big differences in prevalence of childhood obesity.

1.3. Qualitative research by in-depth interviewing of key persons

The leading role of local governments in both cities was examined by means of **in-depth interviews** with key persons. These persons were selected in consultation with the town councils involved and the research team. During this consultation the town councillor and the leading civil servant were asked to consider the following selection

criteria: (1) experience with relevant health promotion projects and (2) sufficient ability to disassociate oneself in order to be able to reflect on these experiences. The competent town councillor and the leading civil servant involved drew up a list of some ten key persons (in each city). The interviews were held by means of a semi-structured conversation guide. In the first part, questions were asked about a project, which the respondent could choose him/herself. The second part of the conversation guide dealt with a general obesity prevention programme or policy. The questions were of a general nature, so that they showed sufficient openness for the specific experiences of the respondents in various projects or from a specific attitude towards the general policy on the matter.

The reports were drawn up on the basis of notes taken during the conversations, and of the recordings of the conversations. The respondents were sent their interview report and gave feedback. The data from the conversations were analysed on the basis of the analysis units from the theoretical framework on the institutional factors, that is the clusters concerning leadership, internal administrative factors, the policy network, the direct context and the external factors, as explained in point 2 on the state of art. The results obtained from analysing these data can be generalised to the reflection on the leading or steering role of local governments in obesity prevention in Flemish cities. Like the results of other qualitative research, the results cannot be generalised statistically, however they can be generalised theoretically to reflect frameworks about the leading role of local governments in obesity prevention and the relation with influencing institutional factors.

2. State of art on the role of local authorities in preventing obesity

Literature indicates that public intervention is necessary in the prevention of overweight and obesity[1]. Moreover, the local government level constitutes the tailpiece of any public intervention in this field (Swinburn, 2008). The key task of the (local) government in obesity prevention consists of supporting the target groups (such as children, adolescents, etc.) and the first-level actors (such as parents, schools, sports organisations, associations for a healthy diet, etc.), so that the intended groups start to adopt a more healthy lifestyle in terms of food intake and physical exercise (Parker *et al.*, 2009). In this respect, literature has taught us: 1) that the (local) government should show real **leadership** in the prevention of obesity, and 2) that various **other institutional factors** determine the leading role of local governments in the implementation of obesity prevention.

1. It is reasonable to assume that theory on the implementation of overweight and obesity prevention in the general population is also valid for the phenomenon of childhood obesity prevention.

The (local) government can **take the lead** by assuming four major parts. According to literature (Baker and Porter, 2005; Ruland, 2006; Swinburn, 2008) assuming the leadership of childhood obesity prevention programmes can be done by playing different roles:

1) exemplary role by being visible as "puller" and by showing sufficient readiness to take action;
2) steering role of a multi-actor, multi-level and multi-sector prevention network, by "advocating" the preventive approach of the partners' actions, or by assuming the "network management";
3) role of fund raiser;
4) and the role of policy pursuer, in terms of stimulator of the policy process.

From the study of the above references, we could deduce that the degree to which the (local) government can effectively assume the four different parts in the leadership role, might determine the degree of success to which childhood obesity can be prevented and/or counteracted.

Furthermore, the screening of literature provides an insight into an extra number of institutional factors, which might determine the leading role of local governments in the implementation of prevention programmes for dealing with childhood obesity. In this respect, we can distinguish four major issues: namely (1) internal governmental factors, (2) the societal and managerial support (or health policy networking), (3) the direct context, and (4) external factors in the background of the local governments.

On the basis of the literature screening (Durose, 2009; Leurs *et al.,* 2003; Ruland *et al.,* 2003; Vallet *et al.,* 2005), we traced some of the most important **internal governmental factors**:

- the relationship between political administrators and leading civil servants;
- the internal capacities of the departments involved;
- the expertise of leading civil servants and project managers;
- the competences of change managers and frontline workers.

The **societal and managerial support** refers to the existing forms of collaboration between the stakeholders in the **public health network** for promoting a healthy diet and physical activities (Leurs *et al.,* 2003; Parker *et al.,* 2009; Ruland, 2008). That kind of support will to a large degree be determined by the attitude and behaviour of actors involved in the policy network (Block, 2009; Klijn, 1997; Voets, 2008):

- the attitude can be characterised by values such as openness, willingness to cooperate or to build a consensus about the priority in public health matters, involvement, trust, etc. ;

- also their behaviour is an important element, certainly in cooperation, consultation, mutual and external communication, follow-up of engagements, division of tasks, competence in conflict resolution, etc. ;
- the relation of the most powerful (or strongest) actors in the prevention network with the rest of the actors within this same network.

In the **direct context** of the local governments, the most important institutional factors, which can determine the leading role of the local governments in the promotion of a healthy diet and physical activities might be (Knoepfel *et al.,* 2006; Leurs *et al.,* 2003; May *et al.,* 1998; Ruland, 2008; Swinburn, 2008):

- the attitude and collaboration of the target group(s);
- the input of the supra-local authority (e.g. via regional health consultation, organisations of sports promotion, etc.);
- a mix of policy instruments, in which "hard" policy measures constitute the backbone for more "soft" measures;
- the mobilisation of like-minded movements (e.g. on climate, mobility, healthy diet, fitness, alternative medicine, sports, etc.);
- research resources (evidence base).

In addition, **external factors** (in the background of the local governments) could possibly have an effect on the leading role in the implementation of prevention programmes for handling childhood obesity (Chang and Christakis, 2003; Leurs *et al.,* 2003; Ruland, 2008; World Health Organization Europe, 2006):

- the nature and quality of laws and regulations of the national or regional public policy;
- the attitude (or mentality) of the population towards its own body weight and the problem of overweight and obesity;
- the attention of the mass media.

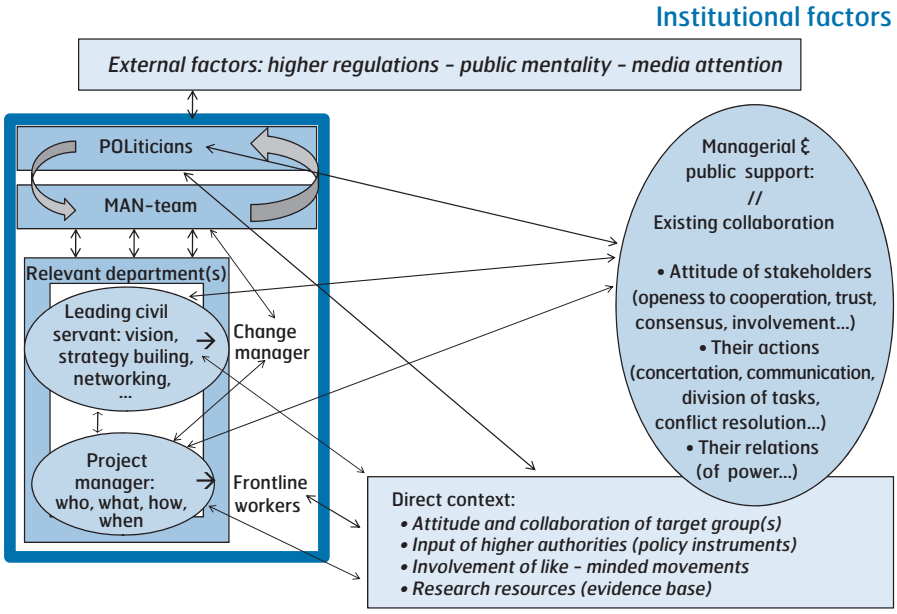

Figure 1: Overview of institutional factors, relevant for the steering role of local governments in childhood obesity prevention

3. Results from the case studies

3.1. Leadership (political and administrative)

3.1.1. *Visibility and readiness to take action*

In city A there is one town councillor who assumes leadership concerning health policy in general and obesity prevention in particular. He emphasises his own unique role, but also points out the fact that he is part of a council which does not hesitate to make quick decisions and which is prepared to link these decisions to actions resulting from the town services. For this town councillor, his openness for figures stemming from reality constitutes a part of his leadership. In city B, two town councillors claim leadership concerning health topics: a town councillor for public health and a town councillor for a healthy city. This is an important contrast with city A. Moreover, we observed the appearance of some competition between the two styles of leadership. The town councillor for public health says he himself is all for offensive ideas and actions. By working with pilot projects, this town councillor often only reaches a limited target group. The town councillor for a healthy city rather adheres to a social marketing approach, where projects are developed in such a way that they reach large sections of the population. However, both town councillors pay attention to the visibility of the local government at mass events.

Typical for this competition between politicians of different parties (within the same coalition) is the so-called "war of the logos". Various respondents in city B refer to the invasion of the Viasano logo or they have questions about the apple logo (created by city B city authority). All of a sudden both of the logos had to be awarded to even actions running long before the creation of the logo itself. A French study established that the Epode programme (comparable to the Belgian Viasano programme) was pushed forward as a label in order to boost recognisability among the population and thus to heighten the reach for other actions with the same logo (Bergeron *et al.,* 2010). Similar questions were asked in French cities about the emphasis on the implication of that logo.

3.1.2. *Steering role in the prevention network*

In city A, the town councillor believes his steering role is based on his conviction that the local administrative level offers an added value in order to stimulate each inhabitant to work on his/her health. In his opinion, it is important for him to be present at the prevention network meetings in view of their further steering. He also finds it important to take the lead in assessment meetings concerning past interventions or actions. In city B, the town councillor for public health considers himself to be a forerunner, who senses and spots social problems, for instance concerning obesity, sooner than others. In order to tackle these problems, he then seeks all potential interested partners to set up actions aimed at the various target groups concerned.

3.1.3. *Fund raiser*

Of course, additional resources are welcome for the town councillor in city A, though cooperation between all actors involved is much more important. As he himself says: *"As soon as a certain dynamics is started, we can always search for additional resources in a creative way."* To do so, he can certainly appeal to a leading civil servant who can raise funds from different sources: a KBS-programme (King Baudouin Foundation), provincial subsidies and also material support from the business community. In city B the town councillor for a healthy city has appealed to large budgets, notably one and a half million euros from the Flemish commuter fund. Moreover, the participating companies are co-payers for the "I bike, I move" project.

3.1.4. *Policy pursuer*

In city A, the town councillor personally pursues all kinds of health policy aspects. It is clear to him that the health policy plan constitutes the basis to start up any necessary policy processes in view of a healthy and active lifestyle. Drawing up this health policy plan in itself is also an important policy process steered by a functional team, which consists of civil servants from the town and from the social services department. This functional team has served as a steering group for the development of this health policy plan, which in turn is only a means to implement and stimulate the policy. *"As it is, I am simply glad we have a plan, but we're not there yet. It is far more important*

to make a lot of links in this plan. By doing so, you get new ideas and thus the policy continues to grow."

According to the town councillor the health policy plan constitutes an occasion to match it horizontally with other existing policy plans and areas. If this matching is to be put into practice, those persons responsible will have to cooperate. In order to stimulate this cooperation, the town councillor wants to emphasise the sense of urgency with the responsible persons. Therefore he wants to involve them in all kinds of projects. So far, various municipal services as well as the social services department were represented in the steering group of the "*Loop naar de maan*" project (literally: run to the moon), a project aiming at the promotion of physical activity and a variation on the format of the "10 000 steps". The town councillor obtained support from the leading civil servant who succeeded in scaling up the "breakfast at school" project that started at one single school and increased to several schools. She also made the link between the *"breakfast at school"* project and the aim of the social services department concerning intergenerational work. The leading civil servant concluded that the search for members for such cooperative working groups on exchanging health information between generations creates in turn new policy dynamics.

In city B we observe that no one has said anything about stimulating the policy processes. A vague local social policy plan, an unclear administrative agreement, was only mentioned indirectly. Moreover, there were other signs indicating a poor health policy development. The question is whether the conversion of projects promoting a healthy lifestyle into a policy is being foiled by the tension between both competent town councillors.

In sum, several roles of leading politicians and civil servants (exemplary role, role in the media, as a networker, fund raiser, policy pursuer, etc.) stress the striking contrast between the leadership style in both cities. In city A the attitude of the town councillor and even the leading civil servant indicates that they consider themselves as managers at the local government level. In city B the city councillor on public health and his collaborator have a rather activist style of leading their city in the prevention of obesity. And the other city councillor for a healthy city has a more or less social marketing approach towards the leadership in obesity prevention projects.

3.2. Internal governmental factors

3.2.1. *Relationship between politicians and leading civil servants*

According to the town councillor there exists an exemplary level of cooperation in city A. This way of governing not only applies to the town council, but also to the relationship between politicians and leading civil servants and ultimately it also applies to the willingness to cooperate with numerous outsiders and to reach a wide audience. "*The strength of our town council lies in its various forms of cooperation, for instance between the town and the social services department. This is also the case within the*

so-called bench of Aldermen. Each town councillor reads the files of the other town councillors. This can lead to heavy discussions (and to some "skirmishing"), but we always end up with a decision supported by the entire council." The town councillor is aware of the factors which play a role here: *(1) "In city A there has for generations been an absolute majority of one political party. (2) In city A we have decided not to install any cabinets. (3) The policy framework of the local social policy plan does actually work in practice; hence we sense that we no longer work alongside each other".* All these factors play a part in the governing power of the local governments (town council and social services department) to let actions and projects from the health policy plan proceed smoothly and to cooperate with all stakeholders and to reach a large audience. In this respect, both the town councillor and the leading civil servant refer to the "*loop naar de maan*" and the *"breakfast at school"* projects.

In city B, the politicians and a cabinet member of the town councillor for public health report the relations between the coalition partners to be good. "*Basically, there is space within the coalition, precisely because the coalition is so broad. Hence, everybody gets the chance to create a distinct profile for him/herself."* However, within this coalition there is some tension between the town councillor for public health and the town councillor for a healthy city. This tension manifests itself by questions about the use of certain logos and at certain press moments, where the media seemed to have had too much attention for the statements of the town councillor for public health who is also a doctor. This town councillor's cabinet member can situate this tension within a historical context. During the past three terms there has been an evolution underlying this tension: (1) increasing electoral weight of one of the coalition partners, (2) the altered constitution of the last coalition, (3) the premature external communication about a town councillor with explicit competence for a "healthy city".

These relations between the coalition partners seem to have a negative influence on the horizontal integration of the health topic. In the view of the town councillor for a healthy city, the matching between the horizontal story of a "healthy city" and the rather vertical approach of the public health services poses some problems. This administrative context also has its negative influence on the implementation of the Viasano project. The town councillor for public health is competent for this project, but it should be developed horizontally within the municipal services. And this aspect is precisely the competence of the town councillor for a healthy city, with whom there is no optimal cooperation.

Moreover, the rather tense relations between both town councillors competent for health matters also seem to have a negative influence on the official support of various projects and interventions. In time, the health official was obliged to give priority to projects of the town councillors for public health. This meant that the public health services could no longer keep up the "healthy city" working group, for instance. Likewise, it could no longer take part in some local actions. Finally, a leading civil ser-

vant criticises the lack of a policy framework and of an overview of which services are participating in which projects.

3.2.2. *Internal capacities of the departments involved*

Within the local governments, meaning both the town council and social services department, only limited capacities are available, says the city A town councillor. In 2008 the health policy plan was prepared and designed by a functional team in which four civil servants are active. For the implementation of this plan, two full-time equivalents are employed. In addition to this there is a working group "city in shape" which organises campaigns on healthy food and sufficient physical activity for town and social services department staff. Both the town councillor and the leading civil servant point out the consequences of the limited capacities. Thus, the successful "*loop naar de maan*" project cannot be repeated and it is difficult to invest oneself in the horizontal coordination with many other services that are themselves overburdened with plans and aims.

The city B town councillor for public health is also of the opinion that there is a limited capacity within the town council. There is no mention of the social services department, because in city B these were considered as two separate worlds. As far as staff is concerned, there is about one part-time equivalent member of staff available who can be employed as a health civil servant. The town councillor for a healthy city rather aims at the creativity of municipal services such as the services for mobility, sports and environment. However, he also refers to the creativity of other municipal services such as the culture department. For horizontal activities concerning a healthy city, the town councillor can also rely on the administrative working group for the wellbeing of municipal staff. Partly due to the tension between the town councillors involved, the "healthy city" working group has come to a stop. In city B one can also count on the capacity of the sports department, which in its activities aimed at various target groups, systematically pays attention to physical activity and health.

3.2.3. *Expertise of leading civil servants and project managers*

In city A the leading health policy civil servant has at her disposal a huge amount of inspiring expertise for preparing, developing and following up this policy. She has experience with (1) a design method for strategic planning, (2) practical procedures on policy follow-up and process control, and (3) participative methods for involving less privileged groups in various phases of the policy cycle[2]. The respondents in city A also mention the importance of introducing project managers in the "breakfast at school" project. From the conversations on the "breakfast at school" project it appeared that the involved school director and the community worker held some sort of shared job

2. Screening political scientific literature on the concept of the "policy cycle", four phases can be distinguished: (1) preparation of a policy plan or programme, (2) the decision making itself as a formalisation of the plan or programme, (3) the execution or realisation of the plan or programme, and (4) the evaluation, monitoring or feedback on the impact and/or outcome of the plan or programme which has been decided on.

as project managers (figuratively speaking, of course). The director turned out to be a true leader who could pull the project forward. The community worker had the complementary expertise of a co-player who could orchestrate the cooperation of all partners involved.

In city B, the cabinet member of the public health town councillor situates the leading expertise in particular on the town councillor cabinet level. In this cabinet the many societal challenges are looked at from an "action-oriented sensitisation" approach. This expertise is then used for instance to adjust the Viasano model. The town councillor for a healthy city rather refers to the expertise of the management team. In order to develop his measures or projects he can rely on their expertise concerning the setting of task priorities and the organisational conversion of ranges of duties from projects within municipal departments. In addition to this, this town councillor can also rely on the creativity of the sports department. As far as the policy development is concerned, the head of this department shows a great deal of creativity in matching sports (and physical activity) with education, also an important topic for obesity prevention.

3.2.4. *Competences of change managers and frontline workers*

In city A the change manager (of the city organisation) plays an important role because he/she had trained the leading civil servant in the strategic planning methodology when drawing up the housing policy plan. That change manager had also taught her to work with the SWOT-analysis. In doing so, the leading civil servant had also gained experience with adapted methodologies for stimulating the cooperation with the less privileged target groups.

In city A, the health civil servant apparently works in the frontline of most of the projects and has contacts with various target groups. From several talks it appears that she has a clear view of the possible effectiveness of the actions or projects in which she takes part, often quite apart from a structural approach. "*If there is no policy for a structural approach of health problems (with prohibitions and taxes), then those projects and actions can only draw attention to the health promotion topic.*" However, she will continue to emphasise the need for a structural policy. In city A, we can also highlight the competences of the female staff member of the integration department. She points out to speakers (for instance on obesity prevention) that they should consider the world of experience of the target audience and should illustrate their lecture with recognisable examples. She also indicates that the family doctor plays an important role as a frontline worker for immigrant target audiences.

From the conversations with a number of respondents in city B it appears that the health civil servant, who is also project coordinator for the Viasano campaign, not only holds the office of project manager, but is at the same time supposed to have the competences of a frontline worker. This is probably related to the limited internal staff

capacity for the health policy. However, there are limits to the versatility with which the municipal staff can work.

These case studies on institutional factors clarify the weight of the political situation at the local government level (especially the electoral competition) on the internal governmental factors within the city organisation. Moreover, according to the institutional context, local politicians will tend to have different kinds of relationships with the leading civil servants, varying from an open and intense cooperation to a conditional and formal collaboration. And eventually the differences in those relationships will have their impacts on internal governmental factors, such as the available capacities of the departments involved and the degree to which the expertise of leading civil servants, change managers and frontline workers are put into operation. No doubt both factors, namely the differences in the political and administrative context, will have their impact on the effectiveness of CBIs on obesity prevention.

3.3. Societal and managerial support (local health policy networking)

3.3.1. *Collaboration of governmental actors and stakeholders*

In city A, the advisory council for preventive health really is the focal point in the health promotion network. This health council plays an important role in numerous areas of the health policy. The advisory council for preventive health was involved in drawing up the health policy plan through a delegation in the steering group of that planning process. In fact, its main task consists of organising the consultation about the implementation of the health policy. Consequently, it also plays a role in the follow-up and process control of the health policy plan. The advisory council for preventive health also pays attention to the topic of physical activity and has therefore set up a working group that has developed the "*health walk*" as a project. In order to promote physical activity among various target groups, the advisory council for preventive health cooperates closely with the sports department. The advisory council for preventive health also plays an important role in steering all kinds of projects such as the "*loop naar de maan*" and the "*breakfast at school*" projects.

In addition to the advisory council, the town councillor also appeals to others, especially social advisory councils, for organising participation in the drawing up of the health policy plan. In return, the town councillor expects them to inform and consult their rank and file. Besides the health promotion network, the network on community building was also mentioned. The latter is supported by a cooperation agreement between the town council and a regional institute for community development. This network is also involved in the "*breakfast at school*" project at a primary school and hence, the health topic is also cropping up in community work.

In city B, the situation is less clear. There is no real central point for the health promotion networking. This network does not exist as such, but is established each time

a project is being organised. Consequently, a network is being initiated by the organisation of Ethical Vegetarian Alternative (EVA) around the Thursday Veggie Day (TVD) campaign and another network around the Viasano programme. Although a health council exists in city B, apparently, it is not regarded as a body, which promotes health networking either. For instance, the city councillor did not ask their advice before starting the TVD campaign. Nevertheless, the health council develops projects independently from the city authority.

Quite a number of partners from the health sector are represented in this health council, such as family doctors, pupil guidance centres (PGCs), local clubs, associations or societies, dieticians, physiotherapists, occupational therapists, etc. These partners seem to be involved very little in preparing and implementing health promotion projects. In addition, several respondents complain of the reluctance of the PGC to enter into projects or programmes organised by the town, although they participate in health policy programmes at schools.

Most other complaints about collaboration with stakeholders in city B point out the not particularly cooperative attitude of the schools and education networks. "*We (the town) prepare everything from A to Z, but the people from the schools never have time. This is also becoming a bit of a mentality problem within education itself. As it is, children have but little physical training and sports at school, we (the town) offer them all kinds of possibilities and then there is so little response from the schools. That hurts!*" Nevertheless, the town of city B intends to introduce the health topic in the schools through other networks. For example, within the "flanking education" network, the link is made between the school and topics such as health, mobility, safety, environment, etc. And within the "w-education" network, (with a "w" for welfare and wellbeing), it is the intention to handle school problems concerning welfare and wellbeing and to involve welfare and education people and organisations in doing so.

Furthermore, there is also an impressive sports and physical activity network. "*In our city there is a network of sports councils. Besides the general sports council there are also district sports councils (focusing more on recreation and sports for all), a competition sports council, a sports council for senior citizens, for youngsters and one for disabled people, etc. The youth sports council is the most relevant body as far as the childhood obesity topic is concerned. In this council, the largest number of physical training teachers are represented. Thus, we are well informed of the evolution of the children and youngsters. In the council, the physical training teachers discuss these evolutions of the youngsters, for instance the increasing childhood and youth obesity.*"

Finally, the health topic is also brought up in the community work network through breakfast parties. Since 2005, these breakfast parties have been organised in three districts of this city, by the welfare services (with the health civil servant) and the community work services. Numerous municipal services and other partners have participated in the project, namely the sports department, the Red Cross, women's

associations, childcare services, the town guard, the environmental department (concerning sorting of waste, residue and litter), the project *"fien gezien"* (make yourself be seen) (on road safety and visibility in the home-to-school traffic), the library (book topics), bakeries (people bought their bread from local bakeries), circle of family doctors (through lectures of individual doctors), adult education, etc.

3.3.2. *Attitude of governmental actors and stakeholders*

In city A, the chairman and a member of the advisory council for preventive health, both of them general practitioners, are in favour of a legislative initiative. *"Thanks to parent committee actions the number of beverage machines in schools is indeed reducing, but as soon as school is out, the pupils can buy soft drinks in the immediate neighbourhood... On this point some regulation ought to be established."*

In city B, we particularly note that one respondent (a paediatric endocrinologist) thinks that obesity prevention should start at a much younger age. *"In fact it can start from birth onwards. And prevention could also be aimed at pre-school children (in the family). Kind & Gezin (a Flemish public organisation for advice on child well-being) should be involved in this, in order to convince parents of healthy food and sufficient physical activity. From our own research it appears that already 3 to 4% of the four-year-olds were overweight, whereupon this obesity increases spectacularly at a later age. Now prevention is 'far too late'".*

3.3.3. *Relations of the most powerful and the rest of the actors*

From the conversations it appears that in city A the town council and the social services department are seen as the most powerful health promotion actors. Moreover, some signals emerged about what is expected from the town council. Some are of the opinion that the town council should gear up its support to the cooperation within the health policy. Others think that the town council should give a follow-up to the extended school activities.

In city B, most respondents do not consider the town council to be a powerful health promotion actor, which is an important contrast compared to city A. Moreover, the social services department does not even come into the picture. Perhaps this has something to do with the administrative confusion within the council (the two town councillors with competing competences) or with the gap between politicians and civil servants? The same questions were also raised by the Logo at provincial level, after lacking cooperation with the town council of city B in the framework of a provincial health project.

The interviews with the key persons in both cities shed some light on the similarities and differences between the local health policy networks in both cities. In city A there is structured network, in which the advisory council for preventive health plays a central role in the participative design of the health policy plan and its implementation. In city

B there is a similar council, which has a rather isolated position in the public health domain. Also the role of other social advisory councils is totally different in both cities: in city A they are consulted to give comment on the health policy plan and its actions, while in city B they were not even mentioned in the interviews. In contrast with the systematic organisation of the networks in city A, in city B there is an *ad hoc* organisation of the policy networks, around every major project. And finally it is remarkable to hear that both city authorities collaborate with similar networks on preventing obesity and promoting health, for example networks on education, sports, community building, social welfare, etc.

Factors determining the leading role of local governments in the realisation of obesity prevention projects or interventions also play a part in the **direct context**. From the conversations in city A and city B, it can be deduced that both cities have a strongly similar context. They are supported in a similar way by the Logo. In both cities, the education and community building networks in particular present themselves as like-minded organisations, which are open to bring the health message to their target audiences. And in both cities there is a limited research capacity to give the effects of projects and interventions a scientific basis. Insufficient data have been gathered on the external context, so no statements were made on this subject in this research.

4. Conclusions and recommendations

4.1. Conclusions

This chapter relates to the context in which the community-based obesity prevention interventions are implemented, and in particular into the **leading role of local governments**. Based on the conversations in both cities, there can be concluded that the institutional factors from the literature are also found in practice. Each case illustrates in a specific way how the town council assumes leadership in the realisation of health promotion projects or interventions. Moreover, it has been shown how internally, administrative factors can support (in city A) or impede (in city B) the steering role of the town councils. Furthermore, the administrative and social health promotion network can also play a more (in city A) or less (in city B) important role in realising such projects or interventions. Finally, we found that the direct context of both local governments (which are themselves part of the context of the interventions) can also determine the power of the leadership, which the town councils assume for realising these projects or interventions.

In both cities, the "leadership" factor acts in a totally different way. This certainly applies to the **visibility and readiness to take action** of the town councillors involved. In city A, the town councillor refers to the personal exemplary role, but also to the ability of the town council to take swift decisions and to the readiness of the departments to implement these decisions. In city B, each of the two competent town councillors

shows a different leadership style. The town councillor for public health considers himself to be a pioneer for turning innovative ideas and actions into practice. The town councillor for a healthy city rather adheres to a social marketing approach, according to which projects are developed so they can reach large sections of the population. Both town councillors pay heed to the visibility of the councils at mass events. Sometimes, this can bring about the necessary competitive tensions, which become evident in the "war of the logos".

In addition, the relation of the town councillors with "the" health promotion network differs completely in both cities. In city A, the advisory council for preventive health constitutes the basis of a permanent network on the matter. In his **steering role**, the town councillor attends the meetings of this advisory council to steer the network activities or to assist with the implementation and follow-up. In city B, there is also a health advisory council, but it seems to play a rather isolated role concerning health promotion. In city B, networks seem to be handled in a dynamic way: they are constructed for projects or campaigns and also seem to disappear when such an intervention comes to an end. Town councillors in city B rather come into contact with various networks that are built around the realisation of these projects as project leaders.

For the town councillor in city A it is clear that the recent health policy plan constitutes the basis to **start the necessary policy processes** for a healthy and active life style. This plan constitutes the framework to develop the cooperation with all stakeholders. In city B, the city councillor for public health has a more activist style of leading the health promotion policy and does not pay that much attention to the management of the necessary policy processes. And the city B town councillor for a healthy city combines a social marketing approach with the collaboration of specific city departments. In every situation, additional means are welcome, but cooperation between all the actors involved is much more important.

Turning leadership into measures, projects and interventions is essentially determined by **internal administrative factors** within the local governments. In city A there exists an exemplary level of cooperation, not only within the town council, but also between the town and the social services department. The strength of the town council is the level of cooperation, which not only makes the councillors in the town council work together, but which also makes them work together with leading and other civil servants, and which makes them eventually also open to cooperation with outsiders. This level of cooperation is also based on the expertise of leading civil servants to prepare, develop and follow up the policy. Finally, the frontline worker and the quality manager also have an important contribution in turning leadership into practice.

In city B, the partners within the governing coalition have a totally different relation: they allow each other the necessary space to create a distinct profile for themselves. Within such a coalition, tensions can crop up which have a negative influence on the coherence within the coalition and on the cooperation with leading and other civil

servants. The competitive relationship between the town councillors seems to have a rather positive influence on the cooperation with outsiders, but in turn it seems to impede the implementation of these projects with external actors. Within the competitive relationship, one can understand that the leading expertise is established mainly at councillor cabinet level. In this respect, the town councillor for public health will rather appeal to the expertise of external actors such as Viasano or EVA, for instance. The town councillor for a healthy city on the other hand will rather refer to the expertise of the management team to turn projects into practice.

The implementation of community-based interventions is also determined by the **health promotion policy network**. In city A, the advisory council for preventive health is systematically involved in all stages of public health policy. This council also takes the initiative to cooperate with the sports department and is also involved in steering all sorts of projects, such as the projects "*loop naar de maan*" and "*breakfast at school*". The town councillor in city A can expand the administrative and social basis for health promotion by appealing to other social advisory councils. Moreover, the health message is mentioned in other networks such as the extended school activities and community building networks.

In city B, the health council is obviously not regarded as the body that stimulates health promotion networking. For every project or campaign **an *ad hoc* network is established each time**. Nevertheless, the town council also takes the initiative to develop projects or campaigns for a "flanking" education policy or a "w-onderwijs" (w-education) programme, which intends to improve the cooperation between the education sector and the welfare sector. A network also seems to be developing on this matter. In city B there is indeed an institutional network on sports and physical activity, which is constituted of various sports councils. The health topic is also sporadically mentioned in the community work network. This results in a rather chaotic situation with a lot of overlapping networks on the prevention of obesity.

4.2. Policy recommendations

On the basis of these conclusions, policy recommendations can be fitted within the OECD vision. In a recent report they point out the **need for coherent interventions** for effective obesity prevention (Branca *et al.,* 2010).

"Existing community interventions indicate that comprehensive interventions are preferable and should include a combination of actions to address the supply and demand of food and actions to address the supply and demand of physical activity."

According to the OECD, attention must among other things be paid within these coherent interventions to social marketing and evaluation systems. The OECD regards the actual involvement of relevant "stakeholders" as crucial. These conditions for coherent interventions fit in well with the research subject of the EEN project.

From the EEN research we can endorse the need for coherent interventions. Moreover, we can indicate that interventions in particular should pay attention to social marketing, evaluation systems and the involvement of stakeholders, from the authorities as well as from the private sector. This part of the EEN research points out the need to focus the leadership of local governments on creating the necessary coherence between obesity prevention projects or interventions that are often far too isolated. It should be noted that this **leading role takes shape according to the institutional factors** in the local environment in which such an intervention is implemented.

This leads us to an important policy recommendation from this part of the research: the coherence of these interventions should be situated on a conceptual level. It would be helpful for the effectiveness of interventions if they would respond to the involvement of specific "stakeholders" in each city or municipality. Research such as the EEN project must supply data for a **conceptual coherence** of community-based interventions, without falling into a blueprint approach and starting to write manuals for intervention implementation. These general findings lead us to two practical recommendations:

- first of all, the national co-ordination bodies for EPODE cities of municipalities should **prepare for the start of an EPODE programme** in a town or a city by interviewing key persons in local government and health promotion networks. These conversations should focus on the institutional factors in each town or city, as is indicated in this report. The material collected from these interviews can help to strengthen the effectiveness of the EPODE programme, the reach of target groups, and/or the involvement of stakeholders;
- secondly, this part of the EEN research should instead support "**learning networks"** of cities and municipalities which can learn from each other's experiences in order to boost the leadership strength and the effectiveness of the specific interventions in their own community. In this respect, the network of EPODE mayors for instance can play an important role. In workshops of those networks, project coordinators and other stakeholders can discuss strategies and methods to overcome the implementation problems determined by institutional factors. The exchange of experiences on best practices with additional information on the institutional context can boost leadership by local government in the prevention of childhood obesity.

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Chapter 5

Methods and social marketing

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EPODE is a coordinated, capacity-building approach for communities to implement effective and sustainable strategies to promote healthier lifestyles and prevent childhood obesity (Chapter 2). In the EPODE methodology, the kinds of methods that are used to change behaviour are of crucial importance. In this chapter we discuss these methods with a focus on social marketing.

Social marketing can be defined as a systematic application of marketing along with other concepts and techniques to achieve specific behavioural goals for a social good (McDermott *et al.*, 2006). It is a process of creating, communicating, and delivering value in order to influence target audience behaviours in ways that benefit society (Kotler *et al.*, 2008). It offers an alternative approach to the reliance on individuals' rationality that is more often the norm in public health and prevention programmes. The primary target of EPODE is families with children aged 0 to 12 years. The EPODE behavioural strategies are developed from inputs derived from a wide range of evidence, including the literature on health behaviour and on social marketing, expert advice and field experience (Henley and Raffin, 2010). The Methods and Social

Marketing Committee of the EEN[1] studied how network dynamics, different methods of behaviour modification and social marketing approaches can be integrated and adapted to childhood obesity and non-communicable disease prevention to enrich EPODE implementation (Chapter 3). The Committee considered the environmental and behavioural determinants of obesity and overweight and the corresponding facilitators and tools necessary to foster changes. The focus was placed on the following research questions:

- How to define priority topics for action?
- Which methods are most appropriate for the planning, strategy development and intervention phases of the project?
- How to facilitate favorable long-term group dynamics in EPODE programmes to facilitate healthier behaviours?
- How to reach priority groups (e.g. low/middle socio-economic level populations)?
- How can stigmatisation be avoided?

After setting the scene of the challenges to be addressed in the field of health behaviour modification, this chapter presents the value of social marketing in facilitating the adoption of healthier behaviours by children and their families. It outlines the ways in which social marketing and related methods are applied in the framework of the EPODE methodology and ways to enrich these practices.

1. Introduction to behaviour modification in public health

Two general approaches to behaviour modification can be distinguished in health promotion[2]. The first approach evolved from the "health education" tradition that was the first to be applied in health promotion efforts and focused on educating individuals to encourage behaviour change. The second approach is firmly anchored in a long-standing tradition of theorising and research in psychology on habits and habit formation; the latter approach is discussed here as the environmental or ecological approach. The health education or reflective approach assumes that giving the necessary information (about "healthy" behaviour and/or about the risks of "unhealthy" behaviour) will result in the formation of an intention to change behaviour and subsequent behavioural adaptation. On this basis, extensive communication strategies were developed and implemented. Gradually, however, it became clear that this "rational" approach has its limitations: it is conceptually weak (Ogden, 2003) and less effective than hoped (Crossley, 2001), especially when fear arousal is used (Ruiter *et al.*, 2001). This relative weakness led to several adaptations of the approach, trying to

1. Professor Luis A. Moreno of the University of Saragossa, Spain, chaired this committee. With the support of the coordinating team and the other university teams of the project, Dr German Vicente-Rodríguez and Luis Gracia-Marco were, together with Dr. Luis Moreno, the principal researchers. They welcomed several other contributions from other experts in health communication, social marketing and health psychology.
2. We restrict this discussion to the domain of primary prevention/health promotion, so we do not consider behaviour modification techniques in treatment or clinical practice.

close the gap between intentions and behaviour and to reformulate it as a model of self-regulation (Hall and Fong, 2007). Important among these adaptations are the extension to a preparation phase including implementation intentions (Schwarzer, 1992; Brandstätter *et al.,* 2001), the right formulation of behavioural goals according to the SMART (Specific, Measurable, Attainable, Relevant, Time bound) criteria, tailoring interventions to the characteristics of the person and their position in the stages of motivation process (Prochaska and DiClemente, 1986), and relapse prevention (Marlatt and Gordon, 1985).

Given these extensions, health education in the context of self-regulation strategies can help people to achieve behaviour modifications (Kok *et al.,* 1997)[3]. However, several reasons to consider additional possibilities for behaviour modification remain:

- large portions of the population tend to ignore health education efforts and are not inclined to invest in changing health behaviour. These are also usually the most vulnerable groups (Peretti-Watel, 2009);
- direct comparisons between educational and environmental efforts show the latter to have stronger effects on behaviour (Horgen and Brownell, 2002; Sheeran, 2006);
- maintaining deliberate behavioural changes remains difficult, so dropouts are frequent (Brownell, 1982; Cooper and Fairburn, 2002; Ogden, 2003).

The second (environmental or ecological) approach is focused on the modification of habits. A habit is defined as a behavioural pattern that is relatively stable over time. Only long-term unhealthy behaviours will have adverse effects on health, and only stable healthy behaviours will benefit health. So the questions are: "What makes unhealthy habits so stable, and, therefore, difficult to change in the long term?" and "How can we create new and healthier habits?".

Behaviour is not produced in a vacuum, but is a response to a given situation. While living conditions always have some stable characteristics, behavioural patterns will adapt to environmental characteristics. The relevant situational features may be physical (e.g. the availability of a pleasant walking route; the availability of fast food), social (e.g. social models; social norms; social pressure), motivational (e.g. the taste of food; the cost of physical activity in terms of effort and time) or cultural (e.g. tradition of a family meal; spending leisure time watching TV; acceptability of breast feeding).

It has now been convincingly demonstrated that we live in an "obesogenic" environment (Horgen and Brownell, 2002), and that non-western populations are rapidly creating similar environments. An obesogenic environment typically elicits the consumption of too much energy and discourages physical activity. So the message is simple: as long as we don't change this environment, healthy behaviour will remain "unadapted" and therefore difficult to maintain in the long term because the

3. Self-regulation strategies are particularly useful when integrated into electronic coaching systems (e.g. HBCoach; www.happybodytoyou.be).

environment "pushes" people towards unhealthy behaviours. We see this in traditional prevention efforts: after initial changes, there is a rapid return to earlier behavioural patterns (Brownell, 1982; Cooper and Fairburn, 2002; Ogden, 2003). In addition, when populations migrate to a new environment, their habits change in a predictable way to adapt to the new situational characteristics (Landrine and Klonoff, 2004). Therefore, we have to change the environment to make healthy behaviours the most natural, easy and rewarding response. However, how do we change the physical environment (e.g. the attractiveness of park areas)? How do we change the cost and benefit of behaviour (e.g. the price of food)? How do we change the social norms associated with being physically active? To achieve most of these changes, it is necessary to collaborate with institutions or actors that have control over these environmental factors (World Cancer Research Fund and American Institute for Cancer Research, 2009).

This objective is in line with one of the fundamental pillars of EPODE-similar projects: to get local political authorities to bring together the people who are responsible for crucial aspects of the environment (such as those involved in food production and distribution, media, town planning, clubs for youth and seniors, the catering industry, school and health care systems, etc.), in order to permanently change the local living environment of the population, with durable behavioural adaptation as a result.

It is also interesting to see that the addition of elements of the second approach to the initial health education methods coincides with demonstrable downward trends in the weight of children in the FLVS study (Romon *et al.,* 2009).

So, in conclusion, we have two major approaches to behaviour modification, the educational and the environmental or ecological approach[4]. In addition, social marketing has been recently proposed as a method incorporating different concepts and techniques in a comprehensive approach that includes both educational and environmental components (Donovan and Henley, 2003; Gracia-Marco *et al.,* 2010). As is demonstrated in the rest of this chapter, social marketing uses communication techniques alongside environmental and other strategies. It is therefore interesting to explore its possibilities and value, and to examine how different strategies can be integrated into the EPODE context. In so doing, we should keep a couple of things in mind:

- the "integration" of different concepts and techniques in social marketing is, at this moment in time, essentially pragmatic. Certainly from a behavioural perspective, much theoretical work has to be done to clarify how the different elements can be integrated in a global strategy, and in what sense this should be called a "social marketing" strategy;
- in practice, actions are conceived essentially as communication strategies, as can be seen below. The selection of the "key message" to be conveyed to the target audience is crucial in the development of campaigns. Environmental and

4. The distinction between these two approaches has recently been discussed as the distinction between reflective and impulsive (Hoffmann *et al.,* 2008) or automatic (Rothman *et al.,* 2009) routes, or also in terms of the simultaneous influence of conscious and unconscious processes (Kremers *et al.,* 2006).

motivational strategies are underused, and if they are used, it is in an indirect way. The challenge remains to further develop these environmental and community aspects in the global EPODE methodology.

In the following section of the chapter, we review the variables that play a role in eating and physical activity related behaviours. In section 3, social marketing criteria are defined and their use in community-based interventions, including EPODE, is discussed. In section 4, concrete methods for behaviour-focused interventions are described based on the literature and on the description of the development of an EPODE campaign. Section 5 describes the EEN qualitative research conducted on the perception of social marketing techniques by EPODE national and local coordinators. We finally propose some recommendations based on the chapter's outputs, in order to enrich EPODE methods.

2. Background for nutrition behaviour-focused interventions

Before describing the methods used, we review, in this section, a number of important variables that play a role in the regulation of eating behaviour and physical activity.

2.1. Restrictive and dieting approaches

Evidence shows that we tend to respond positively to food choice and variety (Wansink, 2006). In their studies of parental child feeding strategies, Zeinstra *et al.* (2010a, 2010b) show that offering choice, distraction and positive information is related to children's fruit and vegetable intake. Besides, research shows that restrictions, control and stigmatisation usually do not foster the adoption of recommendations (Apfeldorfer and Zermati, 2001). The concept of cognitive restriction refers to the restriction of certain types of foods by individuals. In the long term, it has been shown that this results in counterproductive effects (Anzman and Birch, Herman and Mack, 1975, 2009; Orell-Valente *et al.*, 2007; Polivy and Herman, 1995; Polivy, 1996). These outcomes demonstrate the need for messages that recommend a diversified diet without stigmatising any food or food category, rather than conveying negative messages that contain restrictive recommendations. Information regarding appropriate portion sizes for children, as well as the timing and frequency of meals and snacks, should be easy to understand and use (Kok *et al.*, 2004; Prochaska and DiClemente, 1983).

When considering the philosophy of behaviour modification programmes, one of the core principles is to make changes easier and desirable. Efforts to foster motivation for behavioural change should be built on a deep understanding of the direct benefits (e.g. material, social, emotional) for the core target group. The repetitiveness of the activities and stimuli over a long time period appears to be a key factor, as evidence

has shown that a child should be exposed to a targeted food at least 10 to 12 times to lower apprehension and to stimulate a desire to taste it and finally to derive pleasure from it (American Dietetic Association, 2004; Birch and Fischer, 1998).

The 6 (classic) influence principles defined by Cialdini (1994) are labeled "authority" (people are more easily persuaded by individuals perceived to be legitimate authorities), "social proof" (we often look to the behaviour of similar others for direction about what choices to make), "scarcity" (people associate greater value with things that are rare, or difficult to acquire), "liking" (people prefer to say "yes" to people they like), "reciprocity" (people feel obligated to repay in kind what has been given to them), and "consistency" (people feel strong pressure to be consistent within their own words and actions). According to Cialdini (1994) all these principles are persuasive in their own way because they relate to at least one of the 3 basic human motives: (1) wanting to behave effectively (make "right" choices), (2) wanting to build and maintain positive social relationships, and (3) trying to manage the way we feel about ourselves (i.e. self-concept and self-esteem) (Kerr *et al.*, 2005).

2.2. Family and social environment

To better understand the impact of the obesogenic environment and create a positive climate for change, the "Healthy Living" social marketing initiative generated evidence from diverse sources that pointed to a number of issues that act as barriers to lifestyle change within families (Jebb *et al.,* 2007). Examples included limited parental awareness of weight status and associated health risks, parental beliefs that healthy lifestyles are too challenging, the pressure on parents that undermines healthy food choices or the pressure on parents that reduces the opportunities for active lifestyles.

School also has a great influence on children. Schools provide formal education and shape habits and ways of life that often persist into adult life. Learning and experiencing the value of healthy diets and sustained physical activity is enhanced when the policies and actions of schools and teachers are supportive (World Cancer Research Fund, American Institute for Cancer Research, 2009). While schools are acknowledged to be key socialisation contexts, broader social mobilisation is needed to effect significant and long-lasting behavioural change. Interventions involving people as members of families and that involve friends, close-knits communities and other groups are expected to be more effective than those that address people as individuals (World Cancer Research Fund, American Institute for Cancer Research, 2009).

2.3. Physical environment

Numerous aspects of the physical environment can impact upon people's weight status. In the case of diet, these include the quality of food and drinks available, portion sizes and opportunities for employed mothers to breastfeed (Wansink, 2006; World

Cancer Research Fund, American Institute for Cancer Research, 2009). In the case of physical activity in adults, levels of physical activity can be influenced by the physical characteristics of the workplace, hospitals, care homes, prisons, armed forces facilities and government sites, especially in terms of the extent to which they facilitate active commuting and outdoor activities (Commission of the European Communities, 2007). Specifically in children, schools can ensure that children are well fed, physically active and learn the value of good nutrition, recreation and sport. It appears that interventions should integrate as many of these multiple components encouraging healthier lifestyles as possible. Marijn de Bruin (2009) shows the more persuasive techniques used in an intervention the larger the effect (here, the expected effect being adherence to HIV therapy), suggesting that the use of a mixture of different behaviour change techniques could be very effective.

2.4. The EPODE methodology

From this perspective and based on successful previous community-based interventions such as the Fleurbaix Laventie Ville Santé Study (Romon *et al.*, 2009), the EPODE philosophy has the following core elements:

- an awareness of the obesity issue, both collectively and individually, with no stigmatisation of any culture, any food habits and anyone who is overweight or obese;
- a positive, concrete and "step wise" learning process of healthy diet and physical activity, targeting all socio-economic groups with adapted facilitator;
- a long-term programme aimed at changing the environment and thus behaviours in daily life, involving all relevant local stakeholders.

This background highlights the rationale behind the philosophy of EPODE and other interventions based on social marketing techniques. Beyond this rationale, the following section analyses whether core components of interventions can be used in a systematic way to increase their relevance, consistency, sustainability and effectiveness.

3. Lessons from social marketing criteria to promote healthier behaviour

3.1. Why social marketing?

Nowadays, public services not only tackle the determinants of ill health and discourage "bad" behaviour, but also incentivise positive choices and create the conditions under which people feel willing and able to make healthy choices for their own families' and societies' benefit. As noted above, we can distinguish between a health promotion approach that is largely informational (still effective for issues that

require increase in knowledge and awareness such as new vaccination guidelines) and approaches beyond information (such as those relating to poor diet or sedentary lifestyles). Communicating that a desired behaviour is an easy and appealing choice requires considering the reward that the target audience values (e.g. offering incentives), making the place to perform the behaviour pleasant and convenient (e.g. encouraging stair use by placing interesting art in stairwells), and offering benefits that outweigh those of the competition (e.g. walking with friends and need to belong instead of watching television alone) (Huhman, 2010).

In this context, a social marketing approach is included at the top of health improvement strategies in several countries (Stead *et al.,* 2007). The term social marketing has been in use since the early 1970s, and refers primarily to efforts focused on influencing behaviours that will improve health, prevent injuries, protect the environment and contribute to communities (Kotler and Lee, 2008). It involves the systematic application of marketing, alongside other concepts and techniques, to achieve specific behavioural goals for the benefit of society (French and Blair-Stevens, 2007). For example, in the USA, social marketing is increasingly being advocated as a core public health strategy for influencing lifestyle behaviours such as smoking, drinking, drug use and diet (Yilmaz *et al.,* 2005). In the UK, the potential benefits of social marketing were recognised in the White Paper on Public Health, with specific reference made to "*the power of social marketing*" and "*marketing tools applied to social good*" being "*used to build public awareness and change behaviour*" (Department of health, 2004 In: Stead *et al.,* 2007).

A review of the potential of social marketing to help promote health in England was issued in 2006[5] to "*examine ways to improve the impact and effectiveness of health promotion, and in particular to consider the potential contribution of social marketing at national and local levels*" (National Social Marketing Centre, 2006, p. 7). The review supported the use of social marketing techniques when applied in a systematic way (Box 1).

The term social marketing can be used in two different ways: 1) as a set of concepts and principles that provide a theoretical basis for interventions aimed at behaviour change, and 2) as a specific intervention method or planned process to achieve targeted behavioural goals (Rayner, 2007). In the case of EPODE, it is the second usage of the term that applies.

According to French *et al.* (2009), to succeed in implementing effective strategies, we need to move from an "expert and defined product" approach to a "value to user" approach. The aim is to make the healthy and most socially positive choice of beha-

5. Findings and recommendations of this review were compiled using a mixture of methods and approaches including discussions with a wide range of policy-makers, field practitioners and academics across different sectors at national, regional and local levels and a research programme of 12 individual reviews, complemented by 148 workshop and seminar sessions across England during 2005 and 2006, reported to have reached more than 5 000 people.

viour rewarding and, if possible, easy. For social marketing promoters, using social marketing can inform and help to develop a well-targeted policy intervention mixture (Hastings, 2007; French and Blair Stevens, 2005; Kotler and Lee, 2008; Donovan and Henley, 2010).

Box 1: Key findings demonstrating the potential to adopt a social marketing approach to improve health efforts at all levels; from *It's our health* review (National Social Marketing Centre, 2006)

1. Social marketing can significantly improve impact and effectiveness when applied systematically.
2. There is potential to use available resources and mobilise assets more effectively.
3. Current approaches are unlikely to deliver the required policy goals, and leadership and effective coordination are key to success.
4. Social marketing capacity and capability across the wider public health system is currently underdeveloped.
5. It is important to integrate effective research and evaluation into the development of programmes and campaigns to maximise its value.

3.2. Social Marketing Benchmark Criteria

Across the literature, and increasingly in practice, interventions are described as forms of social marketing. The National Social Marketing Centre (NSMC) was established in the UK in 2006. A major focus of the centre is to avoid the risk of work being simply re-labeled as social marketing while not being consistent with its core features. Building on Andreasen's (2002) six-point criteria, the NSMC created the Benchmark Criteria (French and Blair-Stevens, 2006) to support better understanding of core social marketing concepts and principles, promote a consistent approach to review and evaluate, and assist in the commissioning of social marketing services (National Social Marketing Centre, 2010). One of the objectives of the Benchmark Criteria is to ensure consistency with social marketing principles, including the demonstration of a strong customer and behavioural focus (French and Blair Stevens, 2007). The strength of social marketing is to apply these principles in a coordinated, sustained and innovative effort (Gracia-Marco *et al.*, 2010). The Social Marketing National Benchmark Criteria are described with illustrative examples in Box 2.

These general guiding principles are helpful to design, develop and compare social marketing programmes. By specifying the factors to be considered when developing a strategy, the Benchmark Criteria assist in ensuring that the various aspects of a programme are balanced and that all essential elements are incorporated. Nonetheless, one should not forget to take into account specificities of particular public health issues and intervention needs, such as in obesity prevention.

Box 2: Description of Social Marketing Benchmark Criteria and illustrative examples

1. **Customer orientation – Using data from different sources to develop a better understanding of the target audience.**

   e.g. Using formative consumer / market research to identify audience characteristics and needs.

2. **Behaviour – Focusing on changing or reinforcing specific behaviours.**

   e.g. Conduct a broad and robust behavioural analysis, including both the problem behaviour (e.g. level of physical inactivity in adolescents) and the desired behaviour (e.g. reduced screen time and increased outdoor play).

3. **Theory – Using a theoretical framework to develop the intervention:**

   - an open integrated theory framework is used to avoid the tendency to simply apply the same preferred theory to every given situation;

   - takes into account behavioural theory across 4 primary domains: bio-physical, psychological, social and environmental / ecological.

   e.g. Consider various theories (across different disciplines) to identify those that offer insight and opportunities for ways to intervene.

4. **Insight – Focusing on consumer motivations.**

   An approach based on identifying and developing "actionable insights" using considered judgment, rather than just generating data and intelligence.

   e.g. Looking at current behaviours (e.g. no cooking at home) and related knowledge, attitudes, beliefs, perceptions, values and emotional engagement of the audience to develop a proposition to stimulate behaviour change (e.g. join a group of friends for cooking classes).

5. **Exchange – Considering the costs and benefits (financial, physical, social, time spent, etc.) incurred by the target group when changing their behaviour**

   Incentives, recognition, reward and disincentives are considered and tailored according to specific audiences, based on what they value.

   e.g. Time and money spent on joining a cooking class versus personal satisfaction of acquiring a new skill.

6. **Competition – Analysing the barriers that discourage the acquisition of the desired behaviours.**

   Both internal (e.g. pleasure, risk taking) and external competition (e.g. influencers competing for the audience's attention and time) are considered and addressed.

   e.g. Sedentary activities (e.g. screen time) can be in competition with a town event organised for the benefit of the population.

7. **Segmentation – Using a segmentation approach while avoiding stigmatisation.**

   e.g. Cooking classes are organised throughout the town, with a focus on deprived areas involving local associations to tailor the intervention to local needs.

8. **Methods Mixture – Employing an appropriate mixture of methods and avoiding a single method approach.**

   Four primary intervention domains are considered: informing / encouraging, servicing / supporting, designing / adjusting and controlling / regulating.

   e.g. In the promotion of a balanced diet and more physical activity in children, combining various influences in support (e.g. providing leisure and recreational services), education (e.g. changing the perception of vegetables), design (e.g. developing bicycle paths) and control (e.g. setting nutrition standards in school menus).

Based on French and Blair-Stevens (2007)

3.3. The effectiveness of social marketing interventions on diet, nutrition and physical activity

There is growing evidence that interventions using a "customer-focused" social marketing approach can encourage healthier lifestyles that are less conducive to obesity (Gordon *et al.*, 2006; National Social Marketing Center, 2007; Gracia-Marco *et al.*, 2010). It seems that social marketing can help by structuring the process for action as well as integrating various inputs to maximise behavioural change.

French *et al.* (2009) reviewed recent social marketing programmes that included nutrition and physical activity aspects. The results of the review provided evidence that by incorporating educational, behavioural and living environment components, social marketing can improve people's diets by increasing fruit and vegetable intake and decreasing total calorie intake. As regards social marketing interventions for physical activity, Neiger *et al.*, (2008) emphasised the efficiency of initiatives comprising communications and promotions and diverse ongoing activities, events and environmental changes in increasing the physical activity level of a workplace population. Other interventions have succeeded in increasing exercise-related knowledge and improving psychological variables such as self-efficacy or perceived social support to exercise regularly (Caballero *et al.*, 2003). Nevertheless, French *et al.* (2009) suggested that there is weaker evidence that social marketing initiatives tackling physical activity can improve physiological outcomes (e.g. body mass index).

Our previous work reviewed the effectiveness of obesity prevention programmes in children and adolescents and the relationship between the number of social marketing Benchmark Criteria observed and the effectiveness of the programmes (Gracia-Marco *et al.*, 2010). The results of this review showed that over the period 1990-2009, 25/27 of

interventions targeting behaviour change were effective. For body composition changes, 14/23 of interventions targeting BMI or overweight/obesity prevalence were effective and 7/8 of interventions targeting skin-folds were effective. Figure 1 shows the presence of the Benchmark Criteria in obesity prevention interventions between 1990 and 2009.

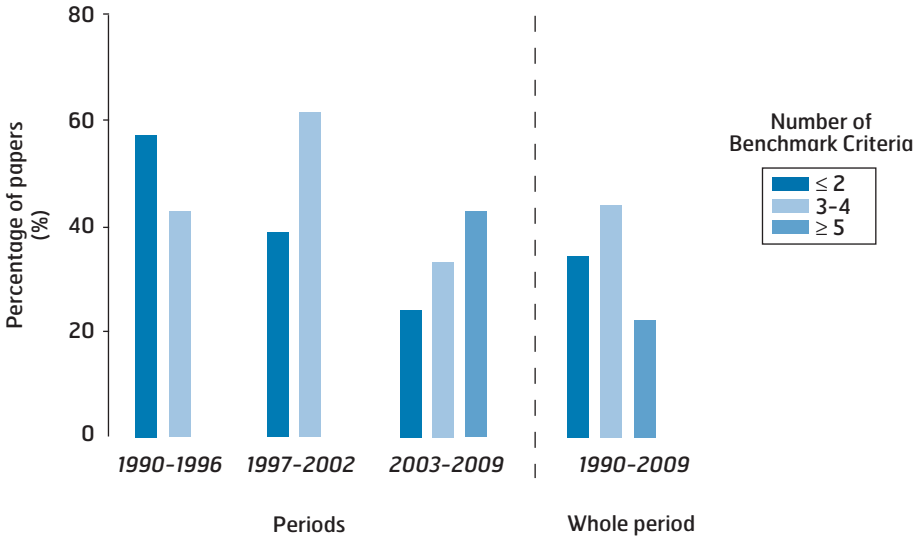

Figure 1: Observation of Benchmark Criteria used in interventions targeting childhood obesity (Gracia-Marco *et al.*, 2010, p. 476)

During the most effective period (1997-2002), 9/9 interventions were reported to achieve behaviour changes. For body composition changes over this period, 5/6 of interventions targeting BMI or overweight/obesity prevalence and 6/6 of interventions targeting skin-folds were effective. In this period of time (1997-2002), more than 60% of analysed papers used 3-4 Benchmark Criteria (BC). However, there does not appear to be a direct relationship between the effect of the interventions and the number of BC used. This may be because most of the studies did not use the BC in a comprehensive and conscious way. Instead, we observed that the BC have not been consistently used and reported in interventions aimed at preventing obesity in children and adolescents, in spite of the higher prevalence in more recent years. Nevertheless, we can outline 2 conclusions:

- the increase in studies using social marketing techniques underlines a growing interest in this type of methodology;
- there is a need for further research to better document the effective elements in social marketing programmes.

These conclusions support the findings of the review conducted by the National Social Marketing Centre on potential effectiveness on social marketing (2006, p. 11),

acknowledging that "*as yet, there are no common and consistently used core standards for social marketing*" and that "*understanding and use of the social marketing benchmark criteria is only at a very early stage*". Interestingly, the review also noted that "*the drive to identify and capture what constitutes best evidence-based practice remains key*", especially since much useful experience and learning has not yet reached the formal literature.

3.4. Social Marketing Campaigns on nutrition and physical activity

Complementary evidence and learning can come from some campaigns that have aims similar to those of EPODE. These include Change4Life (UK), SnackRight (UK) and VERB (US). These campaigns utilised social marketing strategies to modify lifestyle and environmental factors relevant to diet and physical activity to reduce the prevalence of overweight and obesity among children and adolescents. Change4life is the social marketing part of the Healthy Weight, Healthy Lives cross-governmental strategy for England. The aim of this programme is to create a societal movement through which government, the National Health Services (NHS), local authorities, businesses, charities, schools, families and community leaders play a part in improving children's diets and activity levels (HM Government, 2010). Early results showed a high rate of people joining (over 320 000 families) and recalling the campaign. The SnackRight campaign encourages and supports parents and carers of pre-school children living in deprived areas of Cheshire and Merseyside to replace at least one unhealthy snack in their child's daily diet with a healthy one. The project began in 2007 and aims to improve the snacking habits of children as well as the knowledge and attitudes of parents (snackright.co.uk). The VERB campaign was a national, multicultural social marketing campaign coordinated by the U.S. Department of Health and Human Services' Centers for Disease Control and Prevention (CDC). Social marketing campaigns applied commercial marketing strategies to influence the behaviour of target audiences to improve personal and social welfare. The campaign ran from 2002-2006 (Huhman *et al.*, 2005). According to Huhman *et al.* (2010), children aged 9-13 years who saw the VERB campaign increased their physical activity compared to those who did not see it, and positive effects persisted as the children aged into their teenage years.

As a methodology aimed at preventing childhood obesity at community level, involving local stakeholders in a sustainable way, EPODE was launched in 10 French pilot towns in 2004. As a result of an evolving process after 5 years of implementation in France, ten principles have emerged as important criteria to be observed when implementing an EPODE programme (Box 3).

The development of EPODE has been inspired by social marketing theory and experiences. Although it was not initially developed and aligned with all the current social marketing BC, several EPODE principles reflect these criteria. Examples include the use

of evidence from a wide variety of sources (theory use, insight process) and the development of tailored, solution-oriented strategies (customer orientation, behaviour focus, exchange). Another important feature of the EPODE methodology is to build on existing efforts and established strategies at central and local levels to improve the effectiveness of interventions, which is also a characteristic of the social marketing philosophy (National Social Marketing Centre, 2006, p.10). These observations support using the social marketing BC in a more systematic way in EPODE implementation to take advantage of the opportunity to assess the added value of these criteria for large-scale interventions.

Box 3: EPODE ten implementation principles (Borys *et al.*, 2011)

1. Each country (or region) commits to a central coordination support/capacity.
2. Each local community (LC) has a formal political commitment for several years from the outset.
3. Each LC has a dedicated local project manager with sufficient capacity and cross-sectoral mandate for action.
4. A multi-stakeholder approach is embedded into the central and local structures and processes.
5. The approach to action is planned and coordinated, using social marketing to define a series of waves of themed messages and actions that are formed by evidence from a wide variety of sources and that are in line with official recommendations.
6. Local stakeholders are involved in the planning processes and are trusted with sufficient flexibility to adapt actions to the local context.
7. The "right message" is defined for the whole community, but getting the message right means tailoring for different stakeholders and audiences.
8. Messages and actions are solution-oriented and designed to motivate positive behaviour changes and do not stigmatise any culture or people.
9. Strategies and support services are sustainable and backed by policies and environmental changes.
10. Evaluation and monitoring are implemented at various levels through the collection of information on process, output and outcomes indicators to inform the future delivery of the programme.

Today the EPODE methodology is being used in several programmes across the world (Chapter 2). The EPODE implementation 5th principle underlines more specifically the use of social marketing to define a series of waves of themed messages and actions once or twice a year in those different programmes (Table 1). The social marketing approach used in the development of one of these themes is detailed in the following section.

Table 1: EPODE campaigns developed since 2004, in France (EPODE), Spain (THAO), Belgium (VIASANO), Greece (PAIDEIATROFI) and South Australia (OPAL)

Years	epode	Thao salud infantil	viasano by epode	παιδιατροφή by EPODE	Opal
2004	• The season has the taste for **vegetables**				
2005	• The season has the taste for **starchy foods** • The season has the taste for **dairy products** • The season has the taste for **fruit**				
2006	• Let's enjoy **treats** in moderation • We **move** and we like it! • **Easy**, **cheap** and **healthy** eating? It has to be cooked!				
2007	• Let's enjoy **water**! • Health starts **at the table**	• The season has the taste for **fruit**	• **Fruit** are good for us! • Are you **active** or **sedentary?**		
2008	• **Playing** is already moving! • **Fish** has everything good	• Let's learn about **water** and other **drinks** • Let's learn about **starchy foods**	• **Dairy** products, a pleasant change! • Be **active** as a **family** • **Vegetables**, let's go for **more!** • **Move** at **school**, at **work**		
2009	• **Physical activity**, everyone gets into it! Let's meet the **fruit!**	• **Fruit** and **Vegetables**: 5 per day... Set the pace! • **Dairy products**, 2 or 3 per day and... **let's move**!	• How to manage **sweets** and **crisps**? • Be **active**, whatever the weather! • **Meals** • Fewer **screens**, more **movement**	• **Movement** and Physical Exercise on a daily basis • The season has the taste for **fruit**	
2010	• Small, medium, large: at mealtime, adapted **portion sizes** to each one	• 3,2,1... Let's go! **Physical activity** is fun and healthy! • Blub, Blub, Blub... Let's dive into a healthy sea! : **Fish** and **seafood** season	• Light-handed **fat consumption!** **Sleep** / slumber	• **Breakfast**, my secret weapon! • The season has the taste for **vegetables**	• **Water**, the original cool drink! • Give the screen a rest, **active play** is best

4. Concrete methods for behaviour-focused interventions

4.1. Existing Social Marketing framework for childhood obesity prevention interventions

4.1.1. *Total Process Planning Framework*

The Total Process Planning Model is a systematic and planned process for developing social marketing interventions. The learning and insights from each of the five stages (Scope, Develop, Implement, Evaluate and Follow-up) are used to feed into the following stage and the development of new interventions (National Social Marketing Centre, 2006).

A central step in the development stage is the definition of the social marketing mix. This refers to the traditional "4 Ps" of marketing strategy: Product, Place, Price and Promotion (Henley and Raffin, 2010; Donovan and Henley, 2010). A 5th "P", "Partnerships", is commonly added when applying marketing methods to social marketing. It refers to all the stakeholders involved in successfully defining and operationalising the other "P"s, and includes the people involved in defining the product, organising interventions in selected places, specifying the relevant price and promoting the product/behaviour. The Partnership P is a core dimension of the EPODE social marketing mix.

The total planning process is flexible so as to be applicable to any type of social issue. Nevertheless, it is important to be systematic when applying it to an intervention. In the following section, we describe the application of such a process to childhood obesity prevention.

4.1.2. *Application to the prevention of childhood obesity*

In recent years, social marketing techniques have become widespread in community-based obesity prevention programmes (Evans *et al.*, 2010). Previous reviews have shown that interventions using these techniques can achieve positive changes by reducing risky behaviours (Medical Research Council, 2007).

As explained in the introduction of this chapter, behaviour modification in health promotion has been traditionally attempted by using a health education approach. More recently, an environmental approach has been adopted, reflecting a growing appreciation of the environment as an important factor in shaping and maintaining behaviour. This is applicable to the field of childhood obesity prevention. More and more prevention programmes include interventions that follow a social-cognitive approach, including a combination of behavioural, cognitive and environmental factors. Evans *et al.* have proposed a framework based on social cognitive theory for childhood obesity prevention strategies. The framework is organised in 3 parts: a Model approach (using multiple "P" strategies, e.g. reactions to pro-

motion, price sensitivity, product associations, placement to fit audience lifestyle); Implementation strategies (at policy, media, community, school, family and individual levels); and Outcomes (reduced obesity risk factors including improved nutrition, increased physical activity and reduced obesity health effects). This step-by-step approach includes the identification of relevant stakeholders and the implementation of actions at different levels as well as an evaluation process, showing the structured integration of social marketing methods in obesity prevention. Although Evans *et al.* present this model as a working framework requiring testing and further research, it provides an interesting and potentially effective basis for the design of interventions.

The central coordination team of the EPODE programme developed its own approach from various existing frameworks (including the Total Planning Process approach) and field experiences as described below. An illustration of the development of an EPODE campaign, including the contextual understanding of the target audience's knowledge, beliefs and values, is given in the following section of this chapter.

4.2. EPODE implementation and Social Marketing Components

In each country or region, EPODE promotes the involvement of multiple stakeholders at a central level (endorsement from ministries, support from health groups, NGOs and private partners), as well as accessing the expertise and guidance of an independent expert committee. To put the EPODE methodology into practice, a central coordination team, using social marketing and organisational techniques, appoints, trains and coaches a local project manager appointed in each community to champion the programme. The role of the local project manager is to mobilise a multifaceted local steering committee and, by peer-to-peer dynamics, a diversity of local stakeholders especially in schools, pre-schools, extracurricular organisations and social network of associations, which are key settings to implement activities with children and families (Chapter 2).

The approach to action is planned and coordinated using social marketing to define a series of waves of themed messages and actions (once or twice a year) that are formed by evidence from a wide variety of sources and that are in line with official recommendations. Given that cognitive-based strategies alone are unlikely to produce sustainable behaviour changes, EPODE aims to generate social and physical environment changes as well as individual education and personal changes. From various existing frameworks (Hastings, 2007; Kritsonis, 2005), the EPODE social marketing approach can be presented through different steps (Figure 2).

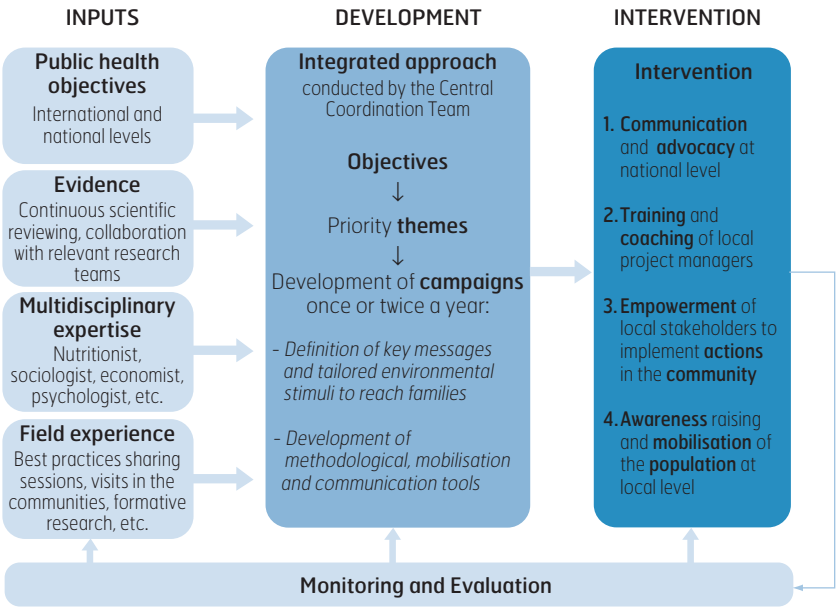

Figure 2: The EPODE Social Marketing Approach

4.2.1. *Inputs*

Through a broad range of methods (e.g. workshops, interviews with local project managers, focus groups with priority population groups) and evidence from a wide variety of sources (official recommendations, expert consultation, reviews of the literature), the Central Coordination Team identifies barriers and facilitators that can prevent behaviour changes among different target groups, and assesses the feasibility of potential strategies.

4.2.2. *Development*

This process leads to the development of campaigns ranging in duration from 6 to 9 months that highlight a specific theme related to food and/or physical activity habits. The implementation of the campaigns is supported by a set of techniques and tools (Table 1) to advocate the programme at national and local levels. This approach empowers local project managers in the development of local dynamics (partnerships, networks) and encourages local stakeholders to implement actions.

4.2.3. *Intervention*

Advocacy

A communication scheme was developed and implemented to regularly inform stakeholders about EPODE implementation and advancements, stimulate partners to stay involved, and enhance EPODE visibility. It reaches out to institutions, health groups and scientific experts, public and private partners, EPODE-elected representatives

and project managers, the steering committee members and the main local actors. It includes a quarterly newsletter, an interactive website and presentations at events ranging from international congresses to local workshops. Continuous communication about EPODE campaigns occurs at a national level in relation actions (events and activities aimed at children and families) that are implemented in towns, and is supported by press relations activities managed both at central level (dedicated office) and in the towns via the involvement of the local communication services.

Training and coaching of the local project managers

A joint meeting about the EPODE implementation takes place at least once a year in each town with the support of the central coordination team, which is also an opportunity to provide specific follow-up and coaching to the local actors. On a continuous basis, training sessions (twice a year) and coaching ensure empowerment of the local project managers in accordance with EPODE principles. Training sessions are also a good opportunity for the central coordination team to deliver guidance documents corresponding to annual or biannual themed campaigns. An annual EPODE congress gathering key actors from all EPODE towns facilitates the sharing of experiences and networking.

Empowerment of local stakeholders

The local project manager regularly meets with the multidisciplinary local steering committee for consultation, decision-making and to facilitate the implementation of local actions. For each EPODE campaign, dedicated mobilisation tools (e.g. action sheets) are also prepared by the central coordination team to facilitate micro-changes in the professional practices of key intermediaries (e.g. educators, teachers, social workers) and the implementation of actions by a wide variety of local stakeholders.

Raising awareness of the population

For each EPODE campaign, communication tools (posters, leaflets, etc.) are developed to directly target the children and families in the town. The tools focus on simple key messages that are solution-oriented and motivational for positive behaviour changes without stigmatising any culture or people. When targeting children, EPODE uses exciting execution elements, pictures and colorful visuals, and also refers to one or more mascots. Simple, easy to understand, concrete (rather than abstract) concepts are suited to a child's cognitive development. When targeting parents, EPODE uses more serious information, such as advice, tips and recipes (Henley and Raffin, 2010). The EPODE branding of these materials ensures a strong visual consistency within the town and across all EPODE towns.

4.3. Case Study: the EPODE campaign on fruit consumption

In September 2009, the EPODE social marketing campaign focusing on fruit consumption was released in France. The implementation of this EPODE theme by the

local project managers and local stakeholders followed a 7 month step-by-step preparation that is described below.

4.3.1. *Inputs*

Selection of the theme

Each time an EPODE theme is developed, the central coordination team ensures that the theme reflects the official recommendations (e.g. the National Plan for Nutrition and Health), the general context (in terms of media messages), the local project manager's opinion and the EPODE stakeholders' interests.

In France in 2006, 44% of children aged 3 to 17 years old were considered low consumers of fruits and vegetables (Étude nationale nutrition santé, ENNS, 2006). Moreover, in 2006-2007, recent national surveys highlighted social inequalities in obesity and found fruit and vegetable consumption to be lower in households with overweight children (Institut National de la Recherche Agronomique, 2007), low socio-economic status (Recours *et al.*, 2006) and lower levels of education (Agence Française de Sécurité Sanitaire des Aliments, 2007).

The context is also a major determinant of the theme. National surveys and media messages aimed at the general public publicised fruit and vegetable deals in supermarkets and affordable recipes.

Finally, as they are the most knowledgeable about the field context, the opinions of the local project managers were sought through regular visits and questionnaires. Each new EPODE theme had to be different from the previous one to keep the EPODE stakeholders interested and mobilised. The previous theme, from February to September 2009, was *"Physical activity, everyone gets into it"*. Thus, a theme linked to food habits seemed more appropriate for the following period.

Experts' contributions

From these findings, "*cooking and eating healthy food for an affordable price*" appeared to be an appropriate angle to take. Consequently, the central coordination team led a literature review, consulted the EPODE scientific committee to validate the appropriateness of the theme and organised a separate meeting with other experts (a food economist, a psychologist specialised in child development, a director of a social grocery network, a food sociologist and a dietician) to identify barriers and facilitators for dietary change. The consensus was that the *pleasurable* dimension of eating fruits and vegetables is fundamental (Régnier, 2009; Rubio *et al.*, 2008). Developing skills and preferences for cooking was considered a core element of the process of liking these foods. The cost/health benefit considerations were also emphasised, as less advantaged people tend to have a preference for immediate pleasure *vs* longer-term health. Compared to negative perceptions and a lack of cooking skills, food prices were not considered to be a key barrier to fruit consumption. On the other hand, the easy-to-prepare characteristics of fruits offer various consumption opportunities

through the day (breakfast, snacks, lunch and dinner) and were noted to be a potential facilitator. That is why the central coordination team decided to concentrate on fruit consumption for this campaign, rather than both fruit and vegetable consumption.

Input from the field

This stage consists of capitalising on existing knowledge from the local project managers and local stakeholders. The central coordination team conducted qualitative telephone interviews with local project managers to access their experiences with the EPODE programme and to identify possible barriers and facilitators (feasibility, receptivity) to the implementation of specific actions that could be disseminated in other EPODE towns. Telephone interviews with six project managers, lasting for one to one-and-a-half hours each, including a questionnaire (30 items), were performed. The main barriers identified were:

- fruits in general were perceived as too expensive, not easy to eat, boring and not trendy;
- processed fruits were perceived as less tasty and healthy than fresh fruits;
- the official recommendation of 5 (fruits and vegetables) a day seemed difficult to achieve by the general population.

The main facilitators identified were:

- processed fruits are easy to carry and to consume;
- children usually like fruits;
- communication tools, colorful images, mottos and a friendly mascot stimulate awareness of the campaign and increase its attractiveness.

With the collaboration of a selection of the local project managers, the central coordination team then defined appropriate actions for each type of local stakeholder (e.g. school nurse, leisure center staff, supermarket owner, etc.). These included:

- identification of various opportunities for educating families about the diversity of tastes and textures of fruits. Specific strategies included providing information about fruits, organising tasting sessions in supermarkets and cookery classes and developing illustrated tools (e.g. recipes, diaries);
- local stakeholders working with more vulnerable families organised visits to pedagogical farms and artistic workshops that involved creating poems, songs and/or pictures about fruits.

  At this point, we had collected an amount of insights that still needed to be organised in key messages and stimuli, according to each type of local stakeholder and in a way that would be easy to implement by the EPODE local project managers.

4.3.2. *Integrated approach used for the development of the theme*

Definition of key messages and stimuli

From the different inputs mentioned above, the theme was entitled "Let's meet the fruits". Related key messages were developed that were further disseminated via tools and actions in the field:

- "Fruits are gourmet and fun";
- "It is easy to make recipes made of fruits for a dessert or for a gourmet break";
- "It is difficult to get bored with the variety and preparation possibilities that fruits offer";
- "It is easy to consume 3 fruits per day during dessert, afternoon break and/or breakfast";
- "Fruits can be affordable - try them fresh, canned or frozen".

Developing the framework for intervention

The central coordination team developed the framework for interventions by considering feasibility issues (costs, time and human resources in towns) and providing guidance through a roadmap and action sheets for the local project manager. Communication tools including a poster, a leaflet, recipe sheets, mobilisation sheets and a press release were developed as well as a pre-tested mascot named Pody (in reference to "EPODE") displayed on communication materials (Figure 3).

Figure 3: EPODE mascot

Taking into account the possible lack of funds for certain local project managers to develop new actions, two calls for proposals were opened to the EPODE towns. They were developed with the collaboration of two EPODE Partners and managed by the EPODE central coordination team:

- "Express yourself with fruits": collaboration with the Ministry for Agriculture and Food to work on the image of fruit in the extracurricular framework. After selection, subsidies of 2090 Euros each were allocated to 13 EPODE towns to facilitate implementation of the action;

- "Share the taste of fruits": this constituted part of the framework of the EPODE/ Orangina Schweppes partnership and was aligned with the EPODE Charter. Based on the selection criteria listed in the call for candidates, 11 towns were selected and allocated subsidies of 1000 to 5000 Euros each.

4.3.3. *Intervention implementation*

Training and coaching of the local project managers

A one-day training session was conducted for the local project managers before the launch of the themed campaign. The objective of the training was to present the theme (scientific environment, key figures, aims of the theme) and the framework of dissemination (tools, action sheets, etc.). It provided an opportunity to distribute and explain a roadmap (a document that including scientific knowledge on the theme and practical implementation propositions) to the local project managers and to answer their questions. The project managers were also provided with the electronic versions of all the tools, on which they could add the logo of the town in a dedicated space before printing. After this, the theme "Let's meet the fruits" was ready to be disseminated in the EPODE towns.

Mobilisation of local stakeholders and the population

One of the main goals was to mobilise a maximum of EPODE potential stakeholders and final targets.

Figure 4 illustrates the diversity of local stakeholders that were involved in implementing this theme and the corresponding tools developed at a central level.

Overview of the activities implemented in the towns

Various actions were implemented at the local level, including the actions developed following the calls for proposals. We can distinguish actions relating to the image of fruits (e.g. creation of songs by the children, a poster contest on common French proverbs, creation of signs disseminated throughout the town, creation of books and calendars, sculpture, dance, graffiti and puppet classes), actions relating to cooking skills (cookery classes aimed at adults, children and more deprived families), actions relating to fruit knowledge (gardening sessions for schools, farm visits) and actions more directly linked to food consumption (e.g. fruit bar at the school canteen, fruit stalls in various places in the town, fruit tasting at the kindergarten, distribution of fruit during snack time at school). Overall, the actions were aimed at changing the environmental context and the perception of fruits, and to improve the inclusion of fruits in everyday eating habits. For example, some of the EPODE strategies to increase fruit consumption were to present them in various formats (fresh as well as processed) and to propose a variety of actions on this theme. Aimed at building "exchange" situations, social marketing strategies may stimulate alternative behaviours around product consumption, depending on the target and the public health objectives (Lowry, 2007). For example, instead of full fruits, children may be encouraged to participate in fruit cookery and then try fruit compotes or fresh fruit in yoghurt.

Table 2: Outlines of the tools developed for each target

Tools developed	Objective	Target	Description
Poster	Widely deliver the main message of the campaign throughout the town	Whole population	• Remind the main messages to be promoted during activities
Leaflet	To be delivered in specific areas and during specific actions on fruit consumption	Families	• Key messages of the action are delivered • A5 Format, 2 strands, to facilitate printing at local level
4 Recipe sheets	Propose ready to use tools Complementary to the leaflet for the general public	Families	• 4 easy-to-make, gourmet and inexpensive recipes with tips, drawings and explanations • Dissemination: schools, medical centers, pharmacies, supermarkets, sport associations, community centers, mail boxes, municipal journal...
13 Action sheets	Facilitate the development of new actions	Local Project Managers	Practical, brief and methodological tools • Sorted by type of stakeholder • Often inspired by field experiences or existing materials • *Modus operandi*: public, actors to be mobilised, budget, equipment, evaluation, etc. • A4 Format, printing on both sides
2 Mobilisation sheets	Help mobilising other stakeholders	Selected local stakeholders	• By category of actors, for "let's meet the fruits": supermarkets and infancy professionals • Sheet given to the concerned actors, by the local project manager • Content: key messages, EPODE background, tips for possible future actions to be included in professional practices • A4 Format
Press release	Help the towns to communicate in the media	Local Project Managers and press relations team of the town	• General description of EPODE and presentation of the new EPODE campaign and key messages • Figures related to the EPODE programme (map) and to the theme (poster) • National Press Relations contacts • A4 Format

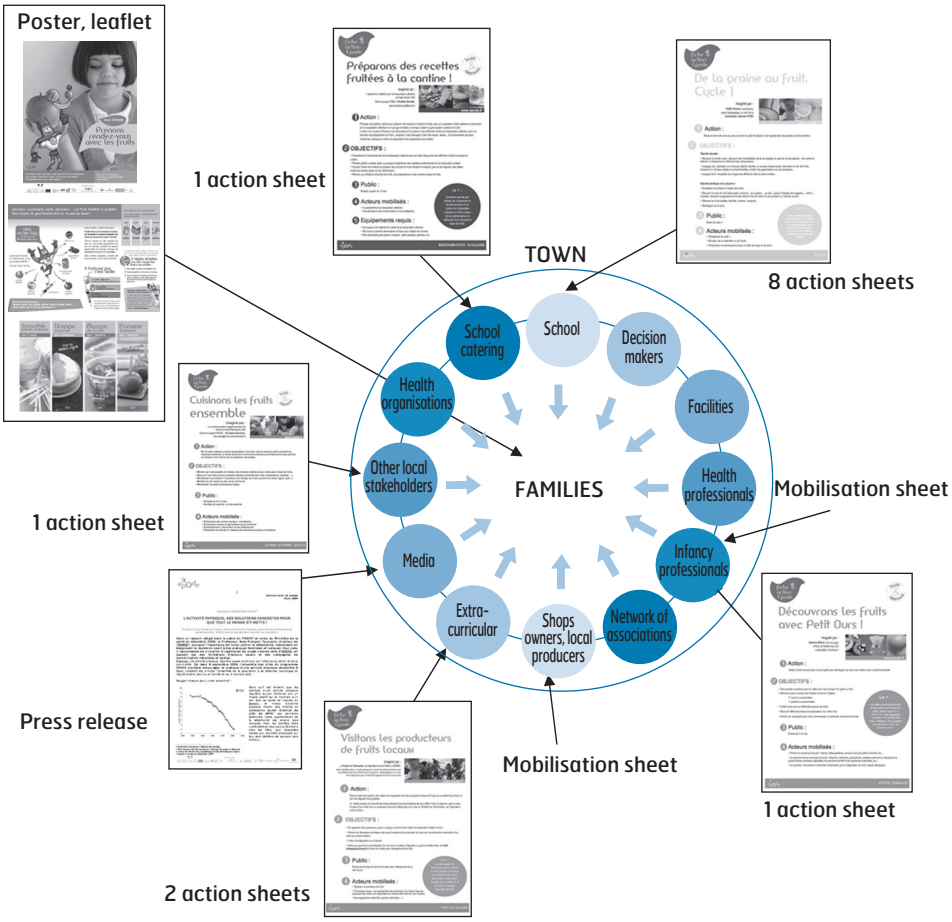

Figure 4: Implementation and communication tools

4.4. First evaluation results

The first evaluation results are summarised in Table 3. They show the perception of the local project managers in terms of perceived usefulness of the theme and the mascot, and of interest in the calls for proposals. They also give an indication of the effectiveness of the tools disseminated to the general public.

Overall, the local project managers rated the various elements of EPODE highly. In particular, they perceived the tools as very useful. The results for the mascot were also very positive, and hence the central coordination team decided to use it for future themes. According to the results presented in Table 3, the two calls for proposals were appreciated and successful, again encouraging the central coordination team to pursue this kind of collaboration in the future. Beyond these specific indicators concerning the fruit theme, general indicators relating to the overall actions implemented were also collected (e.g. presence of a local project manager in every town, sectors

represented in the local steering committees, number of people involved in specific actions), to get an overview of the effectiveness of programme implementation. For example, the number of EPODE pilot towns (among 9 pilot towns) integrating all town services in the EPODE steering committees is presented in Figure 5.

Table 3: First evaluation results

Indicators	Methodology	Results	
Local project managers' perceptions of the usefulness of the tools	Questionnaire to local project managers (January and February 2010) N = 26 local project managers	Roadmap	0 — 7.5 — 10
		Action sheets	0 — 7.1 — 10
		Mobilisation sheets	0 — 7.1 — 10
		Leaflet	0 — 8.6 — 10
		Poster	0 — 8.3 — 10
		Recipe sheets	0 — 8.8 — 10
		EPODE mascot	0 — 7.2 — 10
		Appreciation of the EPODE mascot by the general public	0 — 7.4 — 10
Interest in the 2 calls for proposals	Questionnaire to local project managers (January and February 2010) N = 26 local project managers	"Express yourself on fruits"	0 — 8.5 — 10
		"Share the taste of fruits"	0 — 7.5 — 10
Implementation of the 2 calls for proposals	Count of the number of projects developed, total funds allowed and total population reached by the actions	"Express yourself on fruits": • 13 projects • Total fund: 40 000 € "Share the taste of fruits": • 11 projects • Total fund: 40 000 €	

However, there are limits to these first evaluation results. The difficulty of evaluating the dissemination and effects of such a campaign lies in the wide scope of the intervention, the involvement of various stakeholders and settings and the inclusion of behaviours that existed to some extent before the launch of the campaign and are supported, highlighted and/or up-scaled. Defining precisely the boundaries of the intervention is therefore one of the challenges. Moreover, there are difficulties in assessing behaviour change specifically related to the implementation of this 6 to 9 months campaign because behaviour change often occurs over the longer term and because of the lack of resources to conduct studies on perceptions, behavioural intentions and behavioural change of the targeted population prior to and after campaign implementation. The next section of this chapter, and the subsequent chapter on monitoring and evaluation, provide guidance on improving the implementation and evaluation of a social marketing framework in the field.

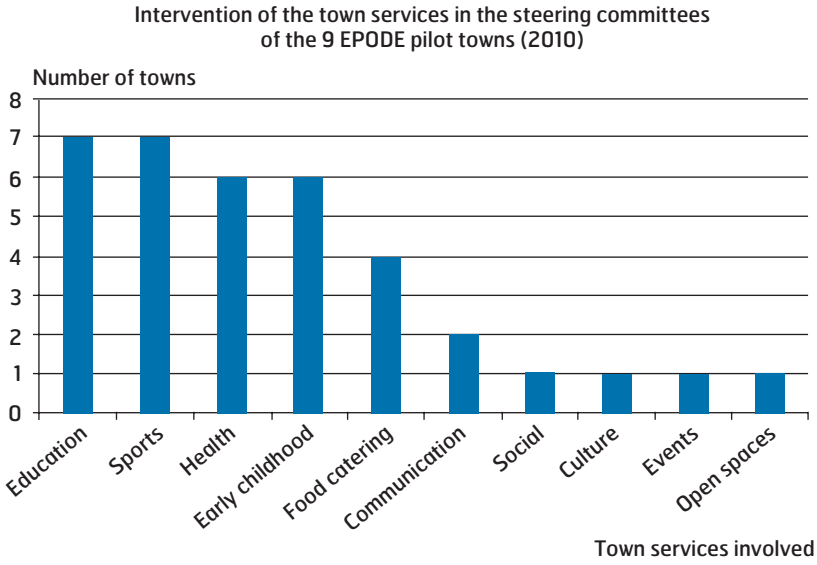

Figure 5: Intervention of the town services in the steering committees of the 9 EPODE pilot towns (2010)

5. EEN qualitative research conducted on the perception of social marketing techniques by EPODE national and local coordinators

5.1. Introduction

Communication between the local and national coordinations is important. Local project managers should be in regular contact with the national coordination organisation to provide updates on project implementation (e.g. activities performed). They should constantly assess the efficiency of what they are doing, based on their perceptions of the responses from the target population. The communication and discussion between local and national project managers plays an important role in the effectiveness of the programme. To investigate the effectiveness and outcomes of interaction between local and national EPODE representatives, Saragossa University conducted a qualitative study. The study and its findings are described below.

5.2. Material and methods

Fourteen interviews were conducted with the national coordination teams and the local project managers to explore their opinions and experiences about the EPODE programmes in Europe (EPODE in France, THAO in Spain, VIASANO in Belgium and PAIDEATROFI in Greece). Questions were related to: expectations of local project managers from the national coordination, local project managers' opinions about

the development of the programmes; motivating factors for participants, local project managers and stakeholders; ideas for strategies to change undesirable behaviours; crucial factors to maintain acquired behaviours in the mid- and long-term; extent of stakeholders' participation; and knowledge of social marketing theory and programme evaluation. All the interviews were recorded and analysed. Intermediary findings were discussed during 3 EEN workshops involving a total of 50 participants from 10 European Countries involved in EPODE and similar community-based interventions and representing various skills and backgrounds (public health, health communication, social marketing, press relations, psychology, nutrition, public affairs). These workshops were aimed at sharing the techniques used in a selection of childhood obesity prevention programmes at the community level[6] and discussing good practices to apply social marketing methods for childhood obesity prevention at the community level.

5.3. Results of the qualitative study

The interview data indicated that the predominant reaction was positive. The findings can be summarised as follows:

1. The interviewers recommended that local project managers should be motivated, communicative and creative people having the capacity for mobilising stakeholders. They felt that the National Coordination should provide more information about how the project is being developed.
2. In general, all the projects in which they were involved were considered to have been well developed. However, some adaptations were proposed to increase motivation, such as organising more activities, providing more information to families and organising more meetings with the local project manager.
3. The economic situation of some families was considered to be the main barrier to implementation and mobilisation.
5. The positive and repetitive messages, the continuity of the programmes and the follow-up of children's and parents' involvement were perceived to be crucial to maintaining improved behaviours.
6. Small shops were recognised as the less participative stakeholders. Schools, health-related centers (hospitals and sport centers) and politicians were the most participative.
7. In general, the knowledge about social marketing theory is poor among the local project managers.
8. The funding was considered to be the main barrier that, if addressed, would help to improve both the quality and success of the programme.

6. Seven case studies were presented: 1) "Moving more actively on an everyday basis" (EPODE, France), 2) "Everything affects us, especially ourselves" (Iceland), 3) "Blub, Blub, Blub... Let's dive into a healthy sea!: Fish and seafood" (THAO, Spain), 4) "Less screen, more movement" (VIASANO, Belgium), 5) "Breakfast, the secret weapon" (PAIDEIATROFI, Greece), 6) "Promoting healthy lifestyles and sustainability" (PRAIS, Romania), 7) "Let's meet the fruit" (EPODE, France).

9. Differences in the success of each project were found. For example, EPODE achieved a decrease in the body mass index, while the other programmes have not published results yet.

The study outcomes indicate that the use of positive and repetitive messages and the fostering of close relationships between national and local level representatives and between those implementing the programme and the target population are primary factors to consider when planning and developing community-based obesity prevention programmes. Funding can be a barrier that needs to be addressed to improve both the quality and success of the programme.

5.4. Recommendations to enrich EPODE methods

Several suggested recommendations emerge from this short survey and the EEN discussions.

5.4.1. *Priority topics for action*

- Topics should match national recommendations.
- They should then be further defined according to the needs of the priority groups (bottom up process), taking into account their expectations and interests.

5.4.2. *Planning*

- This stage should involve the definition of long-term objectives, the development of specific action strategies and the creation of messages and stimuli.
- This phase appears to be critical to build valuable partnerships in order to facilitate effective intervention funding and implementation.
- Formative research (e.g. through focus groups) is of great value. It is also possible that there may be a wide variety of data already collected (but perhaps not published) that can be used to better understand the context prior to action.
- A healthy living brand appears to be an important component of an effective campaign, most likely because it can allow the target population to feel "part of something".
- The need for population segmentation should also be assessed at this stage.
- The dissemination strategy used to convey messages and stimuli should be defined thoroughly to ensure priority groups are reached.
- When considering community-based interventions, strong involvement of local authorities is needed (see EEN committee working in collaboration with local authorities).

5.4.3. *Interventions*

- In terms of local organisation, the EPODE experience suggests that the local project manager is the cornerstone and hence that the best skills should be sought when hiring the local project manager of a new EPODE town.
- Tailoring the intervention for priority groups is an important component of this step (such as by relying on "ambassadors" such as "local leaders" or "local champions" to convey messages and stimuli).
- Empowerment of the EPODE stakeholders and targeted populations appears to be critical for long-term behaviour change.

5.4.4. *Evaluation*

- The information collected at this stage should document the extent to which the stated objectives have been achieved (Chapter 7).
- As regards feasibility concerns, it seems worthwhile to collaborate with local experts (e.g. university researchers) in order to collect evaluation data. The more outcome data sought (e.g. BMI of children, dietary and physical activity habits), the greater the methodological difficulty and cost of implementation. Using academic researchers to undertake this work can provide access to methodological expertise in a cost-effective manner.
- It would be ideal to include as much "objective" data as possible in the evaluation process (e.g. data from accelerometers and active transport indicators).

These findings suggest an agenda for further research and improvement in the implementation of EPODE and similar programmes. They should contribute to a more systematic application of methods to encourage healthier behaviours in the long-term among the populations of the communities where such programmes are taking place.

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Chapter 6

Public-private partnerships

Thomas Alam, Monique Romon

1. Objectives and methods

1.1. Objectives

The research committee on "Public-Private Partnerships" (PPP) was responsible for:

- "producing and disseminating concrete guidelines regarding the public-private partnership in the field of obesity prevention CBIs, including ethical, legal and economic aspects;
- facilitating the establishment and implementation of relevant PPP in the box of Epode-like approaches;
- developing an ethical charter to be signed by interested public and private partners/sponsors in the box of Epode-like initiatives;
- sensitising key opinion leaders within their own country about the benefits of the implementation of Epode-like programmes" (Grant agreement, 2008: 4).

1.2. Methods

To do so, we implemented a methodological design which started with a review of the literature (scientific articles, official publications, existing charters, etc,) and preliminary interviews to better understand what PPPs are in the field of health promotion, what

the key issues to consider are, which in turn enabled us to typify the PPP frameworks implemented within European Epode-like programmes. From July 2008 to December 2010, we engaged in qualitative research which required interviewing relevant actors in the field of healthy lifestyle promotion as well as actors involved in Epode-like PPPs, and resorting to ethnographic and participatory observations to analyse PPPs in practice. Although this research mainly targeted the French programme[1], actors were met and meetings were observed in other European countries (Belgium, UK and Spain) so as to ensure our analyses and recommendations made sense beyond the French borders[2].

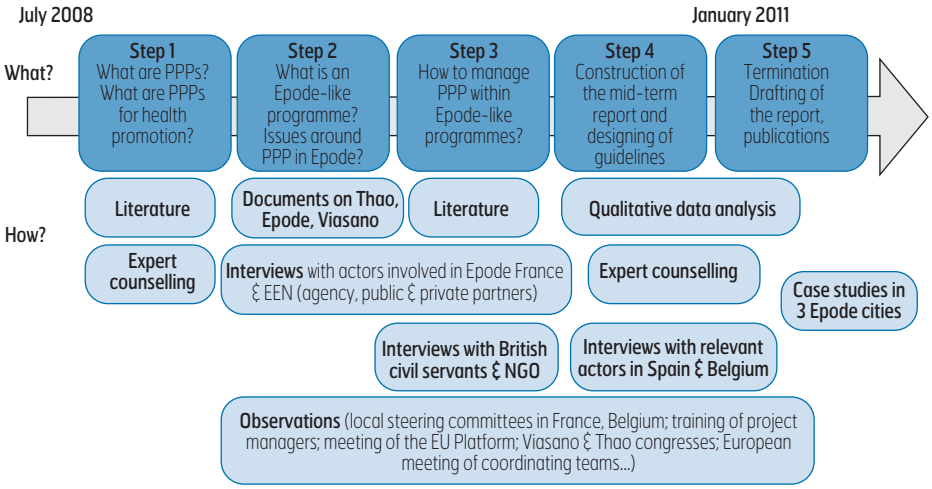

Figure 1: Methodological design

Box 1: Presentation of the interviews

A total of 33 semi-structured interviews were conducted by the team. In the remainder of the article, interviewees will remain anonymous. **Itw 1** to **Itw 11** were led with representatives from national coordination of Epode-like CBIs, **Itw 12** to **Itw 23** with representatives from the public sector, **Itw 24** to **Itw 30** with representatives from corporate partners, and **Itw 31** to **Itw 33** with representatives of NGOs not involved in Epode-like programmes.

Although always adapted according to the circumstances and to the context of the partnership, the discussion broadly followed the same interview guidelines:

1. Pr M. Romon is the President of the FVLS association which was clearly an asset for this research. In addition, Clémence Courcol realised a comparative analysis of the implementation of Epode in two French towns in 2010 (under the supervision of Thomas Alam as part of her MA dissertation), and realised a further case study in the city of St-Quentin that was more precisely concerned with local PPPs.
2. Dr T. Alam conducted 26 interviews: 9 with public actors (5 in France, 1 in UK, 1 in Spain, 1 in Belgium, and 1 in Brussels with Director General Robert Madelin), 8 with members from the coordinating team of Epode, Viasano, Thao, Paideiatrofi and the EEN (5 in France, 2 in Belgium and 1 in Spain), 7 interviews with public affairs representatives of 4 corporate partners and of 2 company foundations, and 3 with global NGO members (Oxford Health Alliance, International Business Forum and International Association for the Study of Obesity).

1) past experience of the interviewee (training, previous positions, experiences in partnerships, etc.), 2) circumstances in which the interviewee and the organisation he/she represents joined (or did not join) a PPP, 3) PPP within or outside Epode (-similar) programmes (genesis and history of the PPP, aims, partners, challenges, etc.), 4) experience-based views on PPP in general (success factors, advantages, disadvantages, risks), 5) possibilities for enrichment, work already done in order to improve PPP.

They lasted between 30 minutes and over 2 hours. Two were held totally on the phone. 5 interviewees have been interviewed two times or more. Numerous actors were also met in less formal discussions.

2. State of the art: PPPs and health promotion

Various definitions of PPP exist in the literature, most of which are structured according to two general worldviews that involve a significant amount of ideological and extra-scientific belief[3]. Although more balanced argumentations are found, a large part of the literature is either enchanted by the PPP framework or very critical[4]. However, drawing on academic (Buse and Walt, 2000a; Klijn *et al.*, 2008) and expert definitions (OECD, 1996; Kickbusch and Quick, 1998; World Bank, 1998; British Department for International Development, 1999), a PPP can be defined as *a cooperation between public and private actors to work towards shared objectives through mutually agreed division of labour and by committing resources and sharing the risks as well as the benefits.*

Nonetheless, PPPs take different organisational shapes according to their aim and outcomes, the type and numbers of partners, their respective roles and resources, as well as the identity of the initiator of the partnership. PPPs in health promotion also generate benefits as well as costs that are always context specific.

2.1. PPP: a polymorph framework

2.1.1. *The partners and their roles*

For a PPP to exist, at least one public and one private partner must be present. According to Roy Widdus (2005) most PPPs include partners from the public sector

3. Wrongly or not, many public actors and NGOs see PPP as being a privatisation in disguise, especially since they can be seen as the Private Funded Initiative's legacy of the Tory government, and therefore associated with the restructuration of health and social services that it embodies (Wettenhall 2003: 79-80). PPPs therefore involve ideological beliefs on the role of the State in society.

4. As Hodge (2004: 39) puts it: "The net benefits of PPPs clearly are still subject to a large degree of **uncertainty and debate**. Just look at the **extremes of policy rhetoric**. On the one side, PPPs are seen by some in the UK as 'yet again screwing the taxpayer', **as 'public fraud and false accounting'**, and 'a sham ... commissioned and directed by the Treasury' with private sponsors being 'evil bandits running away with all the loot' and sons of the 'Fat Cat' (...). In Canada, PPPs have been labelled 'Problem, Problem, Problem'. The return fire rhetoric from the opposing camp labels PPPs as a 'marriage made in heaven' and an arrangement that gets the best from both sectors".

(governmental agencies and institutions that are controlled by governments), the for-profit sector and the "civil society" (academia and NGOs). In addition, those partners are also fulfilling different roles within a partnership – the role of a leader, of a facilitator or a donor (Tennyson, 2003) – and different roles over time. Partners may be defined by organisation or individual and might also be involved at different levels. For example, although the corporate sector might not be involved in the governing bodies it may act as an integral partner at a task force, expert committee or other level[5].

Another relevant distinction is between partnerships in which the management functions are undertaken by a secretariat within an intergovernmental agency (e.g. the GAVI) or in a not-for-profit host (e.g. the Mectizan Donation Programme) and those where the management is housed in a separate legal entity (e.g. the International Aids Vaccine Initiative) (Buse & Waxman, 2001).

2.1.2. *Differing aims and outcomes*

Partnerships have been set up to achieve numerous aims and to carry out various types of activities for several centuries (Hood, 1998). PPPs have been implemented in many policy fields – spatial development, environmental projects, emergency management and infrastructure (Wettenhall, 2003) or school, prison, social welfare (Minow, 2004) and health – and at various levels of government (from the community level to the supranational level). As regards outcomes in health policies, three forms of PPPs are identified (Buse and Walt, 2000b; Widdus, 2005):

- **product-based partnerships** are most often initiated by the private sector to disseminate products (drug donation programmes, promotion of condom use);
- **product-development partnerships** are usually initiated by the public sector to develop or improve a product in a situation of market failure;
- **systems or issues-based partnership** are PPPs designed for a better financing and/or organisational cooperation (e.g. Roll Back Malaria Global Partnership or Stop TB Initiative).

2.2. "Win-win" partnerships

PPPs are regularly presented as "win-win" attempts to "overcome market and government failure" (Hunter, 2003:1). When "*neither side [of the partnership] can achieve its specific goals alone; collaboration is unavoidable*" (Reich, 2000: 618).

Corporate actors can build a positive image, promote their brand, improve their external relations with public authorities and still be acting towards their business case. For example, there is a clear "business case" for food industries to engage in a PPP for health promotion:

5. In the Children's Vaccine Initiative, the private sector was involved only at the operational level (Widdus & Evans, 1999).

1) According to JPMorgan's 2006 report (*Obesity: Reshaping the global food policy*), strong evidence suggests that consumer concern about obesity and related health problems is starting to affect sales and margins.
2) In the workplace, growing evidence shows that "*investment in promoting and protecting the health of employees can contribute very positively to business success*".
3) "*By taking action on consumer health and obesity, companies might also avoid the prospect of regulation*" (Bennett *et al.*, 2007: 7-9).

The PPP framework may therefore appear as a lobbying tool to achieve secondary goals: increasing corporate influence in policy-making, bringing direct financial returns (tax breaks, market penetration) and "image transfer" through which corporate actors become associated with the positive image of legitimate health institutions (Buse and Walt, 2000b; Richter, 2004).

On the other hand, public health bodies and/or NGOs active in the field of health promotion can benefit from extra-resources in terms of funding, expertise, knowledge or from a vast network that may be used for the dissemination of health messages (Bennett *et al.*, 2007). Public health institutions such as WHO (World Health Organization) (Buse and Waxman, 2001: 749) may also be willing to develop interactions with private actors to enhance their image among typically hostile constituencies.

While the health benefits of PPPs must be maximised, the potential risks must be minimised. As such, although a core issue is sustainability, it is also crucial to ensure the public interest is protected within PPPs.

2.3. Issues to consider

2.3.1. *The programme's sustainability*

It should be understood from the launch of a PPP that a company cannot commit forever (Hunter, 2003: 20). In addition, the difference in working speed between public and private actors could prevent swift communication as the latter perceives the former to have a low working speed caused by bureaucracy (Bennet *et al.*, 2007). This is ultimately associated with another core issue for PPPs, trust between partners.

2.3.2. *Protecting the public interest*

NGOs and health professionals often perceive a conflict between profit-making and health promotion activities (Buse and Walt, 2000b). Corporate actors are viewed as pursuing a "hidden agenda" (Lancet, 2009) and conflicts of interest are seen as intrinsic to PPPs. Some observers fear the excessive dependence on corporate funding may lead to self-censorship with the UN, government or NGO counterpart and that business actors may use the interaction to "capture" and/or "sideline intergovernmental public agencies" to set their own political agenda. Other fears that a key concern with such PPP is inequity since partnerships are more likely to focus

on countries and/or activities that offer a reasonable chance of success (Buse and Waxman, 2001: 251).

Furthermore, in the course of the partnership, the clear distinction of duties and rights that existed before the partnership might become less distinct (Buse and Waxman, 2001), which could become controversial if partners have different expectations about their tasks and responsibilities. Therefore, the public sector identity should be maintained. The legitimacy, ethics and motivation of public service and public health should be strengthened rather than downplayed by the demands from the market (Wettenhall, 2003: 99).

2.3.3. *Guidelines and recommendations*

PPPs are not defined by Community law at the EU level and are vertical and horizontal subsidiarity issues.

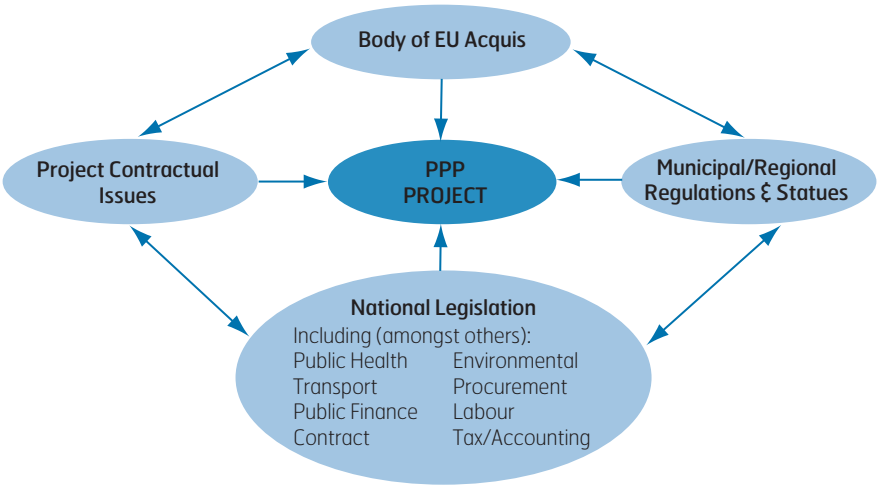

Figure 2: PPP project according to the Commission (2003: 37)

The contractual agreement is the main document setting out the rights and obligations of partners and remains specific to the characteristics of the actual PPP[6]. These *ad hoc* contracts should make sure that good communication and accountability ensure mutual trust, transparency and legitimacy. As Roy Widdus (2003) puts it: "*All organisations claiming to be working in the public interest need to deal effectively with four issues: representation of intended beneficiaries, funders and other stakeholders; conflicts of interest, which include biases arising from any person's organisational affiliation or strongly held convictions; accountability; and transparency. There*

6. When PPPs involve a local authority and a private company, contracts must take national requirements into account (European Commission, 2003: 39). When, PPPs concern private bodies, then private (commercial) law is at stake. To our knowledge, besides regulations on tax, CSR, NGO and company foundations and policy sector legislations that may impact on PPPs, there is no specific public say on the process.

is no perfect model, and decisions are best left to each partnership to determine what works best for them and their ''clients'', with the obvious caveat that they must comply with the relevant laws, ethical conventions, and international and national policy frameworks".

In the remainder of this chapter, these guiding principles should be embodied in internal guidelines. The latter should also be in line with the actual practices of Epode-like PPPs (section 3) as well as in tune with the legal environment in a multi-level Europe.

3. Results from the EEN research

The qualitative data analysis highlighted barriers and levers to consider for the development of PPPs for health promotion as well as recommendations that are relevant in designing the ethical charter. We are mostly reflecting on Epode-like PPPs which unfold in three types of PPPs (Figure 3):

- PPPs with national corporate and public partners;
- PPPs between the NGO and the communication agency in programme development;
- PPPs at the community level between local authorities and medical doctors, food producers, retailers, NGOs, etc.

Table 1: Partners in Epode-like PPPs[7]

PPPs	Corporate partners	Public partners	Coordination & project management
FVLS – Fleurbaix Laventie Ville Santé 1992-2007 Nord-Pas de Calais, France Contracting entity : **Association FLVS**	**Food industries** *Eridania Béghin Say* *Cedus* *Lesieur* *Nestlé France* **Pharmaceutical industries** *Laboratoire Fournier* *Boerhinger Mannheim Diagnostics* *Fournier Pharma,* *Roche* *Knoll BASF Pharma* *Tepral* **Sport industry** *Go Sport*	**Local Public partners** City of Fleurbaix City of Laventie Conseil Régional Nord-Pas de Calais **National public partners:** Ministry of Education Ministry of Research Ministry of Health	**Association FLVS**

7. Table 1 only considers the sponsors of the partnership, not those giving institutional or scientific supports such as professional or academic associations.

PPPs	Corporate partners	Public partners	Coordination & project management
EPODE Ensemble Prévenons l'Obésité des Enfants 2004 France Contracting entity : **Association FLVS**	**Food industry** *Nestlé France/Fondation d'entreprise Nestlé France* (gold partner*, 2004-) *Ferrero France (2006-)* *Orangina Schweppes* (gold partner, 2009-) *Kellog's France (2010-)* **Pharmaceutical industries** *Solvay pharmaceuticals* (2008-) **Insurance companies** *Assurances Prévention Santé* (gold partner, 2004-09) *Fondation d'entreprise ISICA* (2006) **Retail industry** *Fondation internationale Carrefour* (gold partner, 2006-10) **Other** *Terraillon* (2007-)	**Local Public partners** 10 pilot cities since 2004. 41 cities (10 pilot cities) 4 *intercommunal* structures Fees: 3000-6000 Euros/ year (according to the size of the city) **National public partners:** Ministry for Health (2009-) Ministry of Sport (2009-) Ministry of Agriculture (2009-)	**Epode team within Protéines** (until July 2010), **Linkup** and association FLVS from July 2010.
VIASANO 2007 Belgium Contracting entity : **Protein Health Communication** Association to be set up	**Food industry** *Unilever Health Institute* (2007-) *Ferrero* (2007-) *Orangina Schweppes* (2009-) **Retail industry** *Fondation internationale Carrefour* (2007-10)	**Local Public partners** 15 cities (3 pilot cities) in the Flemish, German and French-speaking communities Fees to be introduced in 2011	**Viasano team within Protein Health Communication**
THAO Salud Infantil (Think Action Obesity) 2007 Spain Contracting entity : Fondación Thao (since mid-2009)	**Food industry** *Nestlé Spain* (2007-) *Ferrero Iberica* *Orangina Schweppes* (2009-) **Insurance companies** *DKV Viva la Salud!* **Retail industry** *Fondation internationale Carrefour* (2007-10)	48 cities (5 pilot cities)	**Newton 21** (2007-2009) **Fondación Thao** (2009-)
EEN (Epode European Network 2008 European Union Contracting entity **EEN team in Protéines**	**Food industries** *Mars* (2008-) *Ferrero International* (2008-) *Nestlé* (2008-) *Orangina-Schweppes Group* (2009-)	**EU partners** DG SANCO/European Health Executive Agency **4 European Universities** Ghent University Lille 2 University Saragossa University Amsterdam Vrije University (private)	**EEN team within Protéines France** **FLVS association is associated partner**

* There is no such thing as gold partner or Club des Partenaires in Belgium and Spain.

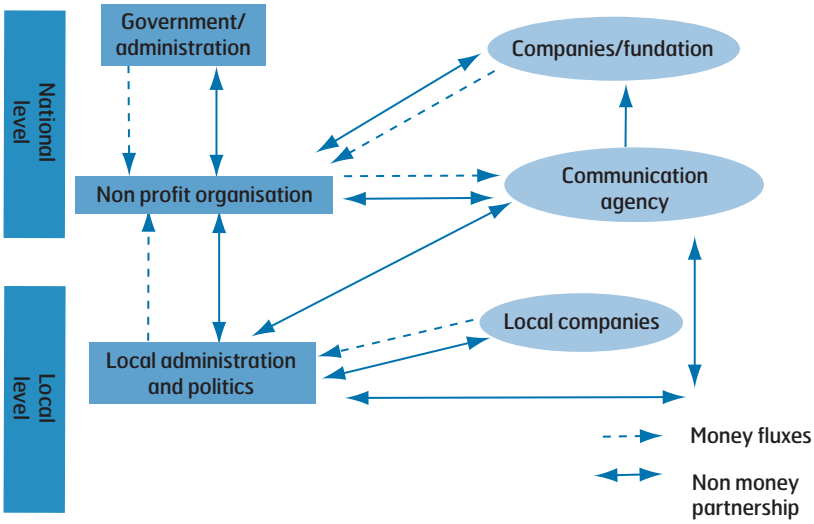

Figure 3: Three types of PPP in Epode France

3.1. Barriers

3.1.1. *The programme's sustainability*

Cost of the partnership. This is a core issue for local authorities that are not legally competent on health policies, as they have to engage in Epode-like programmes for several years (5 in France), sometimes pay fees (3 000 to 6 000 Euros/year in France) and have to employ a project manager dedicated to the programme (a French interviewee estimated the cost of a part-time contract at 25 000 Euros). Such an engagement is clearly a success factor but may also inhibit municipalities. For instance, a city from the North of France joined the programme in 2007 but was not aware that this commitment was mandatory. Acknowledging that it could not afford new staff, it had to withdraw in 2008. Corporate actors are faced with similar issues as they define their CSR according to a limited budget. Two corporate representatives whose company did not join Epode claimed that it was far too advanced for them to do so (**Itw 25, 26**).

Turn-over of corporate partners. The representatives of coordinating teams within communication agencies (Protéines and Protein Health Communication) underline this issue as a core problem. According to a key actor of FLVS, it is obviously easier with small local projects such as FLVS (**Itw 2**) than with national ones. This is one of the biggest challenges when one's objective is the *industrialisation* of a previously grass-roots initiative (**Itw 7**). There is a continuous need for new contracts to match the growth of the programme and within the context of a threatening economy (the Assureurs Prévention Santé, an Epode pioneer member, withdrew from the programme at the end of the five year contract). As an EEN director puts it:

> *"**I have looked for the entire world to become partners**. At the end of the day, we ended up with these three partners but I had contacted plenty of others: La Fondation Carrefour, Nike, Reebok, and so on".* (**Itw 7**)

Potential conflicts of interest within the communication agency. Fund-raising, one of the core tasks of the coordinating team, is really time consuming as it needs to target heterogeneous corporate partners from various industries (food, pharmaceutical, bank, insurance, retail, energy, sport, leisure industries and so on) as well as public partners (**Itw 6, 7**). Although the *savoir-faire* of communication agencies is instrumental in building such partnerships, two potential sources of conflict of interest are identified: some corporate partners are also customers of the agency for corporate communication and there may be a conflict between the two types of communication. The second potential source could be the agency's temptation to use the programme as a business brand. Under the present organisational set up, the question asked by the director of DG SANCO "*how do you prove that the programme is independent of the rest of the activities of the agency?*" remains complex. In France, Protéines, the communication agency registered the Epode's brand as well as associated concept brands in 2003, arguing it had developed the Epode Methodology. Growing tensions between FLVS and Protéines led the former to denounce the contract with the latter in 2010. In this respect, there was a clear danger for the sustainability of the programme, as the agency owns the brand without being involved in the programme.

Lack of valorisation of corporate partners. Several members of the Epode coordinating team (**Itw 1, 10**) as well as the director of Protéines' development (**Itw 6**) have come to the view that national corporate partners – such as the APS insurance company – may not receive enough support in the valorisation of their commitment. This is particularly a problem for company foundations who do not want to be a "sleeping partner" (**Itw 26**) and want to go beyond grant-making to offer their competencies to the direct management or the delivery (**Itw 25, 26, 29**).

Commercial valorisation of corporate brands. The Spanish programme adopted a different attitude towards the valorisation of corporate partners. Whereas both practices are banned from the French, Belgian and Greek programmes, advertising the Thao programme on partners' products or outside partner's offices and providing local authorities with samples in actions targeting children is tolerated, if not encouraged. According to the president of Thao, these practices are not counterproductive:

> "I thought companies could not use Thao for promotion?
>
> *Correct. (...) But since the [companies'] interest is in line with the programme's philosophy, it is not a problem.* ***The only thing is that the message that is promoted has to be accepted by the Foundation... For instance, a [big company] wanted to put a supporting message on its mineral water... for us, it was just perfect. (...) Afterwards, if they can sell more, good for them! We are very happy about it. It is not shocking because it is better to drink water, isn't it? (...) And if 30 million***

> ***packs of water all over Spain display the Thao's label and image, we are more than happy. It is a jackpot!***
>
> You don't see any problem if companies provide samples to Thao cities?
>
> *Honestly? No ! (...). When they are working with Thao, they realise that corporate actors do not influence in any way the programme's development... it is quite the contrary! When these cities are asking those companies to collaborate, they are always eager and it brings them closer. They are enchanted when they receive a little support from our sponsors. The truth is it works very, very, well".* (**Itw 4**)

Last but not least, it appears that the involvement of local partners in a PPP can be a key resource for them as they can be more easily identified by consumers. According to the former Viasano scientific coordinator, the conflict of interest is particularly prone to develop at the local level if project managers are not trained to deal with PPP:

> *"The golden rule for me is that no marketing operation linked to the programme should be allowed, otherwise we lose our credibility if both sides are mixed up. (...) It is a basic rule. However, at the local level, I believe there is a lot to do. (...) Today, it works on a case-by-case basis (...) There is a lot of good will but it is very amateur! (...) We sometimes see certain fruit and veg producers [who] try to negotiate some sort of local monopoly on the distribution of fruit and veg within the framework of the programme. This is an aberrant situation as they are not the only provider of fruit and veg! You always have individuals who try to play with the rules and I certainly believe they have more nerve than national partners who have a [more appropriate] thinking".* (**Itw 3**)

In the three types of PPPs, establishing the duties and rights for corporate partners is not as straightforward as it appears.

Competition between partners. This is a further issue that may prevent private sponsorship. There is first of all competition between industrial rivals – e.g. in France, Nestlé vs. Danone (**Itw 1, 2**), Nestlé vs. Mars (**Itw 24**); in Belgium, Unilever Health Institute vs. Danone Institute (**Itw 8**) – and between retailers such as Carrefour and Auchan in France, Belgium, Spain and Greece (**Itw 29**). Such conflicts are highly visible at the community level where the space granted on Epode flyers to the logo of the local partner and the logo of the national one may differ significantly. As was observed in St-Quentin, flyers paradoxically offer less visibility to national partners' logos which are reproduced in a smaller size than the local partners' ones. Project managers may feel the urge to give credit to the local partnership but such practices may seem unfair to national partners who remain the main contributors.

Moreover, difficulties are met in enlarging the partnership to certain segments of the economy that may be useful in the promotion of physical activity. This is particularly true for the sport industry which does not seem to be ready to engage in the programme or in obesity-related issues, a fact that was underlined by both private (**Itw 2, 7**) and public partners (**Itw 9, 20**). Part of the reason is that representatives of this sector are not willing to associate the positive image of sport with obesity (**Itw 2**).

3.1.2. *Ideological dimensions*

The legitimacy of corporate actors in health partnerships. An obvious barrier to the existence of PPP is the political scepticism to the idea that public and private actors should work hand in hand. PPPs are ultimately linked to the transformation of European Welfare States and to an acknowledgement that States do not have a monopoly on the definition of the general interest. Still important in certain countries, this concern is, however, less salient as the mayor's club of Epode-like programmes are now including representatives from almost every party, even from the French Communist Party. Nonetheless, there is a sectoral dimension to this issue as certain segments of the public administration (public health, education) are less favourable to the PPP framework. For the civil servants who made the choice not to work in the profit-making world (**Itw 13, 14, 18, 21**), but also for several public health experts (**Itw 24**), business is at odds with health.

Conflict of interests or perception of conflict of interests? Apart from public actors, this perception is mostly driven by NGOs (particularly those "with membership", **Itw 32**) which are said to be distrustful about the ethical commitment of corporate actors (**Itw 1**). In addition, although the programme is not entirely funded by food industries, it is seen by many as the creature or "fake nose" of the food industry (**Itw 2**). That Epode may be seen as a "Trojan horse" is a concern for corporate partners themselves. At least one EEN corporate partner expressed her concern that partners were excessively "*chocolate*" (**Itw 7, 24**). In addition, as Nestlé was one of the first partners of the FLVS project and tended to communicate on the programme on its own at the beginning, the project has been identified by various observers as Nestlé's creature. In the course of this research, many signs of this perception were observed, to the point that scholars recently described Nestlé in a scientific article as the only partner of Epode (Kraak & Story, 2010). Not only did most interviewees outside Epode claim that they first heard of it thank to public affairs representatives of Nestlé in various European forums, but many observers believe Nestlé's involvement impairs the scientific legitimacy of the programme. On the one hand, the results from the FLVS experience (Romon *et al.*, 2009) were criticised along this line by one reviewer. On the other hand, Thomas Alam was confronted with French and British public health actors who were either wondering who was funding the EEN and who was "pulling the strings" (**Itw 14**), or asking right from the start "*tell me, what does Nestlé want to know?*" (**Itw 33**).

Effects on the delivery. These perceptions are important to deal with as PPPs should be operating on trust: "if there is mistrust within the general public in the PPP framework, it may weaken the health message and impair the programme's efficiency" (**Itw 33**). In addition, acknowledging the relevance of further financial resources, some civil servants expressed a certain level of mistrust *vis-à-vis* the commercial agency in charge of the project management (**Itw 12, 14, 18**). This strong cultural difference between the public and private sectors may create working difficulties. Moreover,

this perceived mistrust can also generate self-censorship within the coordinating team as regards potential partners who suffer from a sulphurous reputation, such as McDonald's in France (**Itw 2, 7, 18**).

3.2. Levers

3.2.1. *A legitimate project supported by a PPP*

A scientific legitimacy. For the PPP to be trusted, it needs to rely on sound-science. As such, Epode, at least in France, can benefit from the FLVS legacy (**Itw 1**) and build up on its successful results (Romon *et al.*, 2009). Its legitimacy also rests on the support from numerous scientific societies and on the presence of a prestigious and trusted scientific committee whose task (**Itw 18**) is to ensure the seasonal messages are in line with the recommendations of national programmes. Another guarantee of the programme's legitimacy is that it mostly targets children, which would make sure that partners adopt an ethical commitment (**Itw 2**).

An institutional legitimacy. The very fact that more and more local authorities are joining Epode-like programmes can be presented as an indicator of the programme's success (**Itw 29**). Most importantly, it is a programme that appears as "*a model at the European level*" since it has the support of the European Commission (**Itw 1, 2**), which also encourages public and private partners to join (**Itw 28**).

3.2.2. *Strengthening obesity prevention policies*

Fundraising for local public policies. PPPs are expected to boost health policies by providing an extra budget through corporate sponsorship. Beyond funding, joining an Epode-like initiative is a good way to accompany the engagement of local authorities in preventing obesity (**Itw 8, 18, 24**). Recruiting a dedicated staff is a key component of successful local and national strategies. Beyond this indirect contribution, companies can also play a direct role in developing Epode-like programmes. They can play an advocacy role in encouraging cities to join in as they develop regular contacts with elected representatives from the cities where they are based (**Itw 3, 4**). National partners can also provide direct subsidies to Epode cities such as the call for action that Orangina-Schweppes has been organising since 2009 with the support of the Epode coordination unit. Beyond financial sponsorship, this competition can generate emulation as well as exchange of best practices as cities are engaged in a call for proposals and have to develop detailed and structured projects (**Itw 9, 30**).

Sustaining and strengthening corporate actors' voluntarism. For food industries, there is a "*business case*" in getting involved in Epode (**Itw 2, 31, 32**). Promoting self-regulation can be seen as part of a lobbying strategy in an uncertain regulatory context (**Itw 2**). As such, the messages Epode-like programmes convey are in line with the interest of the food industry since it is proposing other alternatives than "constraint/taxation/regulation" (**Itw 30**). However, if one wants to understand that a business

case can also foster a genuine engagement in health promotion, one has to think beyond the "dichotomy of hostile worlds" (Zelizer 2005). Corporate actors want to be acknowledged as legitimate "stakeholders" in the "debate" (**Itw 30**). Even if it satisfies public relations objectives (**Itw 25**), it certainly generates outcomes that did not exist before. For instance, Nestlé France has been implementing Epode for its collaborators in its headquarters whereas Orangina-Schweppes is about to do the same in France, Spain and Belgium. Moreover, the easy access to scientific data (**Itw 6, 30**) enables food industry partners to "*develop an internal thinking around the products and their distribution*" (**Itw 9**). As they "decide how to promote their products in supermarket", they can "influence the retailers to advertise fruit consumption" (**Itw 30**). More generally, as symbolised by the spill-over effects of Epode, changing one variable in obesity prevention may impact on other variables and generate a multiplying effect.

Multi-stakeholder exchange of competencies. The EPODE methodology fosters "synergy of microactions" (**Itw 14**). PPPs are also justified by a need for exchange of professional resources. Civil servants – some of which believe the "*administration is not very good at it*" (**Itw 13**) – may find an interest in having access to professional competencies (communication, social marketing) such as those provided by communication agencies coordinating Epode-like programmes. According to a representative of a global NGO, the involvement of PR specialists is necessary provided the goal does not become a PR objective:

> *"[T]o some extent we really need good PR. (…)* ***If it is a national programme, it is useful to have a big agency. From a financial aspect, (…) you may get better economy of scales…*** *(…)* ***We have to have them because they know how to convince people in a way that the government does not have.*** *(…) But industries also have to be involved and similarly* ***PR companies have access to the industry, so you should not dismiss them.*** *[So], it is not going to work without them: to structuring out information and putting messages out. (…) As I pointed out, Change4Life is slightly worrying:* ***the measures should not be coming from knowing the logo. That's a PR objective****".* (**Itw 32**)

A key asset of PR agencies would be their ability to liaise public and private partners. Indeed, several clients of agencies are also sponsors of the programme, such as in Spain where Nestlé and Ferrero have been clients of Newton 21 for over 20 years (**Itw 4**). Furthermore, following the civil servant in charge of the cross-governmental obesity unit, working with commercial interests may prove useful in getting in touch with the most vulnerable populations who, for various reasons, seem beyond the reach of any single actor and require a multi-stakeholder approach (**Itw 21**).

Last but not least, as Thao is supported by the FC Sevilla foundation and by the Fundació Joventut Badalona (representing two popular sports), the association with sportsmen can help conveying messages to children.

3.2.3. *Discussing and recommendations: ensuring the programme's independence*

Independence of the scientific committee. Although it may prove cumbersome, as several members of the French and Spanish committees have direct ties with the programme[8], a Public Declaration of Interests should be implemented (**Itw 7**). Using best practices from the public sector may be legitimate for PPPs that are mostly coordinated by private actors and give extra guarantee to the managers of national nutritional programmes.

Independence of the programme vis-à-vis the rest of the activities of the communication agency.

Without discarding the sincere engagement of PR consultants, the idea that "*the project management is contracted out*" (**Itw 20**) must be reasserted. As such, contrary to other countries where the programme was first developed by communication agencies, the FLVS association existed right from the start in France and latest developments within Epode's organisational design decreased the overlap between the association and the communication agency. As a Thao foundation was created in mid-2009 and a Viasano association, open to all public and private partners, is to be set up in 2011, these developments may partly clear an ambiguous situation where the programme is directly developed by communication agencies. However, besides configurations where government owns the leadership (such as in Mexico and South Australia), one can wonder what sort of guarantee a foundation or a NGO can provide when key actors of the programme own strategic multi-positions in the organisational set up[9].

Openness, transparency and accountability. Members of the French and Belgian coordinating teams expressed their interest in enlarging the process to local project managers, whom have expressed a desire to be more involved (**Itw 8, 10**). As it happens in company foundations, external members are seen as a guarantee for "the credibility of the programme[10]" (**Itw 26, 29**). In Epode-like programmes, it would therefore be relevant to follow those examples and find ways to develop third party scrutiny, be it from the "great and the good" (**Itw 20**) or from NGOs, "*to provide a sort of oversight which may prevent conflicts of interests*" (**Itw 32**). Finally, ensuring the programme's independence should also start with agreement on the goal. According to Robert Madelin, "*the success factors of the EU Platform also apply to any PPP*":

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8. For instance, while sitting in the French scientific committee, the director of the EEN team is also a minor shareholder of Protéines. Similarly, a member of the Spanish committee is the general director of the Thao foundation and his communication agency, Cinco, is regularly contracting with the programme.
9. In Spain, overlapping activities are likely to generate doubts since the president of the foundation is a former CEO of Newton 21 Spain, since his son is a member of the foundation, since the vice-president is CEO of Newton 21 Europe or since the director general of Thao is sitting on the expert committee and his agency (Cinco) is regularly hired by Thao.
10. Boutros Boutros-Ghali (former UN General Secretary) and Xavier Emmanuelli (founding president of the SAMU social international) are Board members of the Foundation Carrefour for this very reason.

there is a need for "*good metrics*" and for a "*strong annual accountability*" in order to show effectiveness publicly (**Itw 20**), and to "*take away some of the mistrust*" (**Itw 21**).

Ethical charter. The designing and the respect of a partnership charter are complex tasks since it has to make sense from an ethical point view whilst also ensuring that private partners are willing to engage (**Itw 23**). There is first of all a need for an agreement on goals and for a dialogue in good faith. Meanwhile, it is important that partners be rewarded when they are achieving successful outcomes (**Itw 31**). Duties and rights of corporate partners should therefore be asserted, notably as regards communication. Apart from Spain, where a differing analysis prevails, corporate actors are not allowed to use Epode-like programmes for a commercial purpose or to associate the programme with a product (**Itw 1, 2, 10**). Only institutional or corporate communication is authorised. So far, peer-review is believed to be the best tool to prevent transgression (**Itw 2**). Another concern is the selection of corporate partners: Who is legitimate to choose partners? What type of criteria could be used to screen the suitability of partners? Although, these issues will be addressed in the next section, the first problem was partly clarified in France with the setting up of a PPP committee in 2010 (following our previous recommendations).

4. Recommendations

Rules have to be flexible so as to prevent inertia and/or the programme's bankruptcy. It is nonetheless crucial to design adequate governing procedures. The recommendations drawn from the research are largely driven by the universal principles of good governance (Commission of the European Communities, 2001) but also in the management of advisory committees (James, Kemper & Pascal, 1999; EFSA, 2009; IUNS, 2002).

It is first recommended that the whole process within Epode-like programmes be run as independently as possible and be open and transparent. Then, an ethical charter based on existing engagement charters is suggested. Finally, we call for the setting up of a PPP committee, a recommendation which has already been implemented in France in 2010 (see Figure 4).

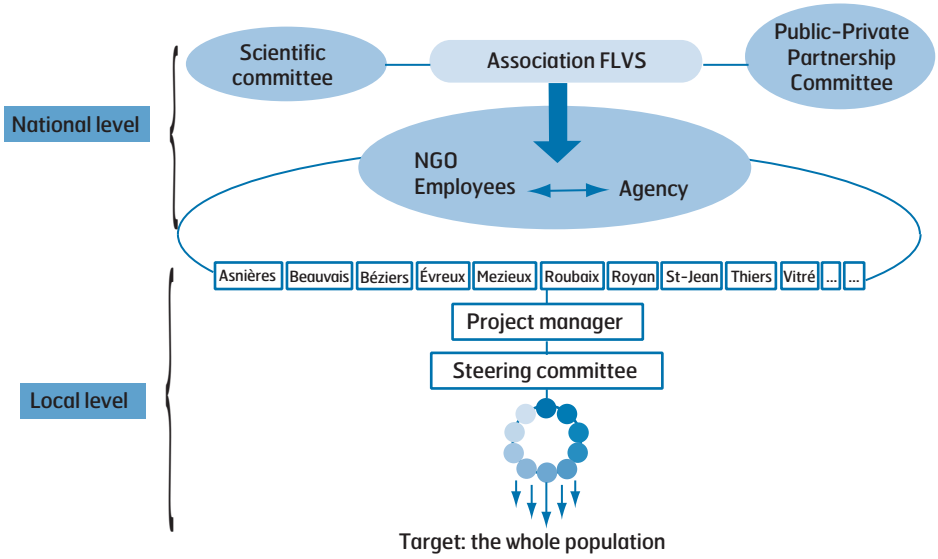

Figure 4: Organisational set-up of the Epode programme in 2010

4.1. Governance of the whole process: transparency, openness & independence

4.1.1. *Independence and transparency of the Board*

Governing rules must ensure the organisation receiving funds and managing the Epode-like programme is independent and transparent. It is important to stress that no representatives of the communication agency in charge of the programme's development should be part of the Board of that organisation. The agency should only stick to its role as service provider and none of its representatives should be allowed to partake in the governance of the project.

4.1.2. *Public declaration of interests for committee and board members*

This declaration prevails for members of the Board of the leading organisation, of the expert committee and of the PPP committee. When an obvious conflict of interests is identified, the member should not take part in the discussion.

4.1.3. *Publication on the website of all the minutes of committee meetings*

To downplay the suspicion generated by the involvement of corporate partners, minutes of Epode-like meetings and Epode-like documents should be made public on the website dedicated to the programme. This should be mandatory for the minutes of the PPP and expert committees (although sensitive commercial and professional data may remain confidential). It is likely that the confidence in the programme will increase if its management and its various partners work in a more open manner.

4.1.4. *Independence of the programme vis-à-vis the rest of the activities of the communication agency*

The associated issues should be dealt with in a "*rigorous contract agreement*" preferably between government or NGOs and the PR agencies as it is a step forward to ensure the independence and credibility of the programme.

4.2. Ethical charter

The ethical charter emerged from the qualitative data analysis and is also partly congruent with the latest contractual agreements in France. As various European examples have demonstrated, the following rules have to be reasserted, and specific training on PPP for local project managers could be developed (**Itw 3**).

4.2.1. *All partners have to respect the programme's philosophy*

- "A smooth awareness of the obesity, both collectively and individually, with no stigmatisation of overweight and obesity".
- "A positive, concrete and 'step wise' learning process of healthy diet & physical activity".
- "A long-term programme aimed at changing the environment and thus behaviours in the daily life involving all relevant local stakeholders".
- Compliance with the philosophy of the national nutrition programmes (NAOS, PNNS, PNNS-B...) where they exist.

4.2.2. *The communication agency is only a service provider*

- It sticks to its role as **service provider.**
- It is hired after a transparent **call for tender.**
- The contract is of **limited duration** (2 to 5 years).
- The contract clearly defines the services provided by the agency as well as their costs.
- **The programme's brand name belongs to the promoter: NGO or government.**
- The agency has to comply with the same rules as the national corporate partners (no promotional use of the programme).

4.2.3. *The national corporate partners*

- They must not intervene in the content of the programme.
- They must not modify the communication tools designed by the agency, in case they are printed.
- *Communication*:

- all communication projects referring to the programme should be transmitted to the dedicated committee[11], internal communication excepted;
- they cannot use the Epode-like programme, its image or logo for a commercial purpose;
- the communication will be **limited to institutional and corporate communication**;
- in addition to the programme's logo, they will have to insert the logo of the other partners in a communication relating to the programme which respects the above-mentioned conditions.

4.2.4. *Continuous local partners*

- Their commitment must last **at least a year.**
- They will only communicate on the Local Authority's territory under the following line: "X, partner of the Epode-like programme in the local authority Y".
- Their logo can be displayed on documents designed by the coordinating team and printed by the local authority, **in the section "local partners"**. If the partner belongs to a group, only the local entity can claim to be a partner of the Epode-like programme in the Local Authority Y.
- The partner cannot use the Epode-like programme, its image or its logo for a commercial purpose.

4.2.5. *Temporary local partners*

- The length of their commitment must be **explicit in the contract.**
- Their communication must not refer to the Epode-like programme, **only to the action in which it is engaged.**
- They may be allowed to display their logo in the venue where an Epode action takes place, provided the label was previously granted to the local authority's action.
- **When the action is a short-term one, their logo cannot be displayed on the documents designed by the coordinating team** and printed by the local authority.

4.2.6. *Ethical issues to consider*

Further discussion may be relevant as regards the following controversial issues:

- should a specific recommendation be made as regards children[12] (marketing)? Should the partners' logo be displayed in school on Epode-like programme's documents?

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11. That is: 1) communication in conferences, congresses, seminars; 2) publication in books, reviews, acts whether they target the general public or not; 3) scientific, commercial, sociological, anecdotal communications; 4) broadcasting by all means (hertzian, phone, electronic), irrespective of the targeted geographical area; 5) fictional scenario or documentary (see Contractual agreement between Nestlé France, Assureurs, Prévention, Santé (APS) and l'Association Fleurbaix-Laventie Ville Santé, 13 July 2004 : 3).
12. Since 2009, Epode has not allowed the presence of the logos on materials distributed to school pupils whereas this practice is illegal in Belgium. In Spain, only a code of self-regulation exists on advertising food to the under 12.

- should criteria exist in assessing the suitability of partners beyond what has emerged as sheer common sense[13]?
- should a specific line be made regarding the respect of human rights, labour law and consumer law[14]?
- should the engagement of corporate partners be linked to a commitment in modifying their offer towards healthier products?
- what should be envisaged for national partners who are also involved at the local level and who can be seen as relevant actors in local PPPs (retailers, fast food chains and so on)?
- should the engagement of trade and industry associations be sought instead of individual companies[15]?
- should there be terms for exclusion of "deviant" partners?

A dialogue on these ethical issues is required, bearing in mind that an overly restrictive charter may prevent the partners' engagement which may jeopardise the programme's sustainability whereas excessively loose recommendations may put the programme's credibility at risk. Setting-up a PPP committee is highly recommended as it will be made competent on such issues.

4.3. A "PPP committee" with a broad remit

In order to safeguard the public interest, the ethical committee option was finally discarded since its ethical remit is vague and uneasy to define and since it is not very clear who will be entitled to seize it and under what circumstances. However, a PPP committee should be set up, which will have to ensure the charter is respected and will be made competent to oversee the whole project management in order to prevent any kind of capture. It will therefore have a wider role than the sole public-private partnership management, precisely because the project management and the PPP management are intertwined. Therefore, it will have to show independence from the project management team and from the other activities of the communication agency.

4.3.1. *Composition*

Its composition will reflect three core principles: moral authority; broad-based expertise; and participation. It will be composed of competent members who are part of the "Great and the Good" but whose expertise should not be limited to public health. Members who have a significant expertise in law, accountancy and social sciences could strengthen the committee's ability to develop more informed discussions on a range of (potentially) controversial issues. Finally, it should be open to the stake-

13. WHO's proposed guidelines on partnership with the commercial sector single out tobacco producers and arms manufacturers as incompatible partners while other UN agencies call for a "creative partnership" (Buse and Waxman, 2001).
14. In this respect see guidelines No 6 and 10 of the Oxford Health Alliance.
15. This position is notably defended by Hancock (1998).

holders (representatives of local project managers, representatives of inhabitants and/or representatives of familial associations, and other relevant NGOs as well as representative(s) of the private partners). This will undoubtedly satisfy the need for third party scrutiny but will also satisfy the demands expressed by both public and private partners in terms of added involvement in the PPP as well as a venue for a mature dialogue.

Box 3: Recommended composition of the committee

- 2 elected representatives from local authorities (ideally from a different political party).
- 2 corporate partner representatives (ideally one gold member and a smaller partner, if applicable).
- 2 representatives from the local project management.
- 1 representative of the national nutritional programme where it exists.
- 1 expert from the scientific committee.
- 1 public health expert.
- 1 expert in accountancy.
- 1 expert in law.
- Representatives of NGOs (to be discussed; participation vs. efficiency).

Members of the coordinating team sit on the committee as observers. They present on-going development at the beginning of each agenda item, they answer questions asked by committee members, but should not influence the course of the discussions.

4.3.2. *Missions*

- Ensure the ethical charter is respected:
  - mandatory approval of the contracting agreement with corporate partners;
  - mandatory approval of the tools and documents that are specified in the ethical charter to ensure their compliance with the charter;
  - free access to the minutes of the meetings between the coordinating team and the corporate partners and all documents they think are relevant to the issues at stake. The coordinating team must report on-going discussions with corporate partners honestly.
- Verify on a regular basis the financial accounts of the communication agency in charge of the project management to guarantee the adequate use of funding.

4.3.3. *Internal organisation*

Creating the new committee generates numerous procedural issues. We list a few below and suggest several options (most of which are best practices implemented worldwide in public bodies and advisory committees). We suggest that the internal "constitution" be voted and accepted during the first meeting of the PPP committee.

How are the members selected? Leaving aside co-optation, 2 options are identified:

- a call for applications for experts and an election for the other members;
- a wide call for applications for all categories.

Apart from the traditional systems of election (which nonetheless require a choice), two ways are identified in selecting candidates from the call for proposals:

- constitution of a jury (according to procedures that are not yet defined);
- candidates, first separated according to the different categories are selected by drawing lots[16].

How is the president elected? The president could be assisted by one or two deputy president(s). We believe the president (or a deputy president) of the committee should also be a member of the expert committee, as liaisons should exist between both. The different voting procedures (unanimity, majority or qualify majority) that could apply are detailed below.

How is the decision taken? There are 3 options:

- consensus or unanimity;
- majority voting;
- qualified majority voting.

We believe options 2 and 3 are more appropriate as they prevent members from becoming veto players. More, they are probably more suitable with the principle of an *agonistic democracy* according to which areas of conflict should be made visible and opposite argumentations should be confronted (Blondiaux, 2008).

What is the term of the membership? For the committee to gain experience and to avoid frequent time-consuming selections, members should sit in the committee for 2-3 years.

How often do they meet? There should be regular meetings (3-4 times a year) associated with a procedure enabling *ad hoc* meetings if needed.

16. This technique, first implemented in Ancient Greece, is believed to be one of the most democratic (Manin, 1996).

Conclusion

This chapter builds on a sociological assessment of an on-going process in several EU Member States and at various levels of government. This inquiry met various hurdles: difficulty in observing an iterative and *sui generis* process; difficulties in becoming accustomed to heterogeneous local institutional settings in the EU; language barriers; and reluctance from the project management as regards observing partnering negotiations between corporate partners and the agency staff, reluctance to disclose minutes of these meetings. The reflection was fed by these difficulties while actions towards the programme's governance were fed by this reflection as several recommendations have already been put in place in Epode France.

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Chapter 7

Scientific evaluation and dissemination

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Introduction

In many programmes evaluation foots the bill. It is commonly considered a necessary evil that has to be done and is often scheduled after programme planning and after the start of activities. It is something that funders and researchers want a programme planner to do and is considered a heavy load on programme resources, such as time and money, and does not seem to bring anything positive to the programme planner. Therefore, evaluation can be a frightening thing for professionals. Not only are many unfamiliar with the methods and instruments to use, but also with the terminology that seems to come with an evaluation. Moreover programme planners and executers think that an evaluation costs time and money, depleting project implementation resources.

And it is true, just like any other project component, an evaluation costs time and must be incorporated in the programme budget. But evaluation is not extremely difficult or impossible for the unexperienced. An evaluation is an aid to improve a programme and a good evaluation plan and execution helps programme sustainability. An evaluation is the appreciation of a programme and shows the way this programme has reached its goals. The outcomes or results of an evaluation provide information for the local organisation, for the target group, for the funders and governmental officials, but can

also provide information for other communities, programme planners, researchers, national and international health surveys, etc.

The EPODE programme can, not only because of its implementation in multiple communities but also because of its length in time, provide valuable information about effective and important elements of community-based health promotion and hence support improvement of the methodology of the prevention of overweight and obesity.

The objective of the Scientific Evaluation and Dissemination committee was to produce and disseminate concrete guidelines for the scientific evaluation of EPODE such as community-based interventions and the dissemination of the approach, and to contribute to the improvement of the monitoring and evaluation process of EPODE-like initiatives.

The aims of the subsequent research by the Department of Health Sciences of the VU University in Amsterdam, The Netherlands, were:

- to describe EPODE as a community intervention and to present a programme theory for EPODE community intervention;
- to advise on the evaluation of the EPODE programme and its defined programme theory using the latest insights on community intervention evaluations;
- to advise on the most adequate method to measure children (weight/height) in order to assess Body Mass Index (BMI), without stigmatising the operation, and to convince parents about participation of the children in the measurements without "distressing" them.

The evaluation of a community-based intervention programme such as EPODE, where multiple stakeholders will be involved in planning and implementing multiple activities in multiple settings directed at different target groups, can be a challenge but is not impossible. This chapter will provide insights into important elements in the evaluation, monitoring and dissemination of a community-based intervention such as EPODE.

1. Objectives and methods

The SED research was conducted from January 2009 up to June 2010. The *initial phase* of this research had to answer the following questions: What are community-based interventions? How can we evaluate community-based interventions without a control town? What are the important processes and elements in the construction of a community-based intervention evaluation and how to disseminate programme results?

At first, document analysis was conducted on community-based interventions and their evaluation. Pubmed/Medline and Google Scholar were used for retrieving

scientific publications. The following keywords were used: health promotion, community-based intervention, evaluation, framework, process evaluation and programme evaluation. In addition, health promotion books were used in order to find information on the methodology of the evaluation of community-based health promotion.

Secondly researchers and professionals studying community-based interventions and their evaluation were questioned regarding effective strategies and methodologies on the evaluation of community-based interventions and health promotion evaluation in general.

The literature and expert views showed that the evaluation of comprehensive programmes, such as a community-based health promotion programme, are best when theory-based or theory-driven. This means that every step in the programme has to be explained beforehand and described in a so-called programme-theory. By doing so the evaluation is directed to assess congruency between planned and actual implementation of the programme and to verify the programme's impact and its underlying mechanisms.

The *second phase* of this research therefore focused on the EPODE programme itself. To gain insight into the processes and stakeholders of the successful EPODE programme, information was gathered through reading and analysing all available documents on the EPODE programme. Information was collected on the set-up and implementation of the EPODE programme in France and its affiliates in Belgium (VIASANO) and Spain (THAO). Furthermore English project descriptions, scientific articles, power point presentations, websites, interviews and visual representations on EPODE were studied.

Additionally, professionals involved in the EPODE programme at multiple levels were questioned concerning the set-up and implementation of EPODE, and their satisfaction concerning the programme outline and implementation, stakeholder involvement, evaluation objectives and evaluation methods. All interviews were minuted, recorded, listened to, transcribed and coded (using Atlas-Ti). The comprehensive New Health Promotion Framework (Saan and De Haes, 2005) led the coding. Thus, the retrieved information resulted in insights into the EPODE programme and identification of key stakeholders.

Following the theory-based evaluation literature, the basis for a programme evaluation is a programme theory. Therefore the *third phase* of this research was the construction of the EPODE programme theory following the information gathered. To construct the EPODE programme theory, four basic sources of information were used: documents, people, prior research and logical reasoning (Weiss, 1997).

In a logic model the subsequent steps of the EPODE organisation and implementation were explicated. This logic model followed input, activities, output and outcome on four levels (central organisation, local organisation, settings and child), the elements

described were stated as programme necessities or variables. Several versions of this logic model were created and discussed with the University team, the EPODE Central Coordination Teams in Europe, the SED committee and five Dutch experts on (evaluation of) community-based interventions. In May 2009 the first version was well received by the EEN Board, it was suggested to add the four EPODE pillars. An adjusted version was presented at the EEN Symposium in Brussels in December 2009. In this version more than 85 variables were identified.

At the SED advisory committee meeting in March 2010, it was decided to reduce the number of variables. The reason for this was that the operationalisations of each variable gave multiple indicators which suggested measurement in the evaluation. The SED advisory committee decided which variables were more or less important to monitor and evaluate. Most of the output variables were considered important and had to have a place in the new model. Finally, 13 variables were placed in a linear model (Figure 4, page 165) and accepted by the EPODE European Coordination Team, Dutch experts and the SED committee in June 2010 as the EPODE programme theory.

In the *final phase* of this research, information was gathered on the best way to measure overweight and obesity with children, and how to inform and not distress parents. This research consisted of literature analysis and interviews with researchers involved in obesity prevention programmes within the Netherlands and EEN involved experts.

During the process of construction of the evaluation framework, researchers gave input to central programme coordinators for the evaluation of EPODE and the other three programmes similar to EPODE in Belgium, Spain and Greece. This stimulated EPODE programme planners to construct and adapt existing materials for monitoring and evaluation. At this stage the central programme coordinators provided valuable feedback regarding the feasibility of the operationalisation of the framework, especially with regards to the indicators to be measured and methods/tools to be used for data collection.

2. State of the art on the evaluation of community-based health promotion

The EPODE programme is a health promotion programme located in the community with the intention of decreasing the prevalence of overweight and obesity in children within that community. EPODE consists of interventions directed to change the behaviour of the child and interventions to change the social and physical environment of the child. In the research assignment and various documents of EPODE, it is stated that EPODE is a community-based intervention; but it is more than an intervention; it is a total programme at community level comprising multiple interventions. Therefore the programme might best be represented with the term community-based health promotion programme. This terminology does more justice to the magnitude and scale

of the programme. This chapter outlines the essentials of a community-based health promotion programme and important steps in planning and conducting its evaluation.

2.1. Characteristics of a community-based health promotion programme

A community-based health promotion programme (CBHP) is a concentration of strategies conducted in a community to encourage healthy behaviour and reduce unhealthy behaviour. It attempts to change health-related behaviour within members of a community and involves many kinds of institutions, organisations, and groups in the delivery of a variety of reinforcing interventions (Van Assema and Willemsen, 1993; Green and Kreuter, 1999; Potvin, 2001). These programmes have a large scope and magnitude, require much planning, coordination, manpower and need large financial resources (Potvin, 2001).

An important element of CBHP is the participation of the individual. By participating in the programme, the programme is more likely to succeed and ensure sustainability within a given context and within resources (Potvin, 2001). Through participation people are enabled to choose healthier alternatives. They are given the means and opportunities to do this and are made active partners in the process of change and its outcomes (Van Assema, 1993; Wandersman and Florin, 2000) and it is also important in the development of a sense of ownership of the programme (Potvin, 2001).

The rationale for CBHP is the notion that individuals cannot be considered separately from their social environment and context. Therefore, CBHP incorporate multiple interventions extending beyond the individual level; in doing so, they seem to have more success in changing behaviours than those who do not (Elder, Schmid, Dower and Hedlund, 1993; Schooler, Farquhar, Fortmann and Flora, 1997). Other important elements of CBHP are empowerment, social network approach, capacity-building, multi-sectoral collaboration and a mix of interventions (Van Assema, 1993; Israel, Checkoway, Schultz and Zimmerman, 1994).

Empowerment is the ability of people to gain understanding and control over personal, social, economic and political forces in order to take action to improve their life situations (Israel *et al.*, 1994). A social network offers social support (emotional, instrumental and informational), it influences through social norms, and presents role models and social comparison principles (Van Assema, 1993). The diffusion of ideas, knowledge and new norms throughout these networks is considered to be important to achieve community change (Van Assema, 1993).

Through capacity building knowledge, skills, commitment, systems and leadership are developed to enable health promotion to be effective. It involves actions to improve health at three levels: the advancement of knowledge and skills among practitioners, the expansion of support and infrastructure for health promotion in organisations,

and the development of cohesiveness and partnerships for health in communities (Smith *et al.*, 2006).

Since determinants of health are not only to be found within the health sector, multi-sectoral collaboration is important to change determinants indirectly related to health (Van Assema, 1993). To change these influencing factors, collaboration between organisations and professionals of the different sectors is essential (Koelen and Ban, 2004).

Finally it is widely acknowledged that the use of a mix of interventions at the same time in different settings, through multiple communication channels and directed to different target groups, helps to get the best results (Brug *et al.*, 2007).

2.2. The evaluation of community-based health promotion

Each health promotion programme is site responsive. This means that the implementation of the programme changes per implementation site following the needs of programme planners and key stakeholders (Green and Lewis, 1986). An evaluation framework should therefore suit not only the programme outline but maybe even more importantly the desired programme objectives, the needs of stakeholders and programme planners, implemented activities, programme budget and the context of the programme (Potvin, 2001; Rossi, Lipsey and Freeman, 2004; Nutbeam and Bauman, 2006).

Several practical guides and frameworks have been developed to assist the planning of the evaluation of community-based health promotion programmes. Examples of such guides are CDC's Framework for Programme Evaluation in Public Health (CDC, 1999), the WHO Framework for Health Promotion Evaluation (Rootman, 2001) and the EPIC model (Holden and Zimmerman, 2006). EPIC stands for Evaluation Planning Incorporating Context and provides a more contextual approach of the CDC framework (Holden and Zimmerman, 2006).

These models or frameworks share common ideas of how to tailor an evaluation for a community-based health promotion programme. Shared ideas in the construction of an evaluation plan are: engagement of stakeholders in the construction of the evaluation plan, evaluation needs and data collection; programme description following a logic model and programme goals and objectives; evaluation questions, design, methods and instruments; stakeholder involvement in analysis; and the dissemination of results.

2.2.1. *Process and effect evaluation*

Research has shown that the evaluation of comprehensive health promotion programmes needs to be a combination of the evaluation of the results of the intervention, the outcome, and of a comprehension of the process (Nutbeam, 1998;

Green and Kreuter 1999; Schreirer, 1994; Goodman, 1998; Cunningham *et al.*, 2000; Bodstein, 2007). The use of a mixture of process and outcome information to evaluate health promotion initiatives is also supported by the World Health Organization (WHO, 1998; WHO, 2001).

By knowing the process, the basic conditions for a successful implementation of the intervention can be determined and the intervention can be repeated elsewhere (Nutbeam, 1999). The process evaluation complements the effect evaluation by providing data on the actual planning and implementation of a programme, i.e. it opens the "black box" behind a programme (Schreirer, 1994; Goodman, 1998).

An effect evaluation answers questions regarding the effect of the programme on individual risk factors or population health indicators (Potvin, 2001). When combined, these mutually reinforcing and complementary types of evaluation contribute to a better understanding and performance of a health promotion programme.

A process evaluation focuses on the process of development (Green and Kreuter, 1999). It provides feedback on the quality of planning and the implementation of the project in order to make revisions as needed (Sheirer, 1994). Its purpose is to strengthen or improve the intervention process, the performed activities and the impact of the intervention and to uncover inhibiting and promoting factors (Green and Kreuter, 1999; Moore and Gibbs, 2010).

For the evaluation of the process, objects of interest are the programme inputs, the implementation activities and stakeholder response to the programme (Green and Kreuter, 1999). Inputs here for are, for example, the theoretical framework (or programme theory), resources and programme goals and objectives (Green and Kreuter, 1999). Questions raised consider availability of these inputs and whether or not the programme was implemented according to plan. The implementation activities include performance of staff, methods of data collection, activities related to the organisation of the programme (e.g. meetings, contact moments) and media distribution (Green and Kreuter, 1999). Stakeholder opinion includes reviews of programme plans, participation level and the response of collaborating partners to the programme (Green and Kreuter, 1999).

According to Moore and Gibbs (2010) the effect evaluation is an instrument for accountability to local government (administration) and the local stakeholders. It examines the impact and outcomes of the programme and focuses on documentation and evidence (Nutbeam, 2006; Rossi *et al.*, 2004). It seeks to determine its overall impact and ability to do what it was designed to do (Green and Kreuter, 1999). For example, the main question of the Dutch Heartbeat programme was whether the programme contributed to the reduction of cardiovascular heart disease; this was supported by evaluations to see change in fat intake, physical activity and smoking (Ronda, 2004).

To make the case that the EPODE programme has achieved a positive impact, effect evaluation requires programme goals and objectives to be set, baseline measurements taken and progress monitored at various points along the way.

2.2.2. *Engagement of stakeholders*

The success of both the implementation and evaluation depends on knowledge, skills, will and resources (e.g. personnel, materials, funding) available within the community to gather data and to analyse it. According to Kopczynski and Pritchard (2004) the local project manager and key stakeholders should agree the programme is worth doing and that the findings will be useful for them.

The best way to do this is to discuss each stakeholder's organisational targets, programme goals and objectives and evaluation needs at local level, to clarify what they want to achieve with a given programme (Kopczynski and Pritchard, 2004). A generic evaluation can help the mindset, but stimulating empowerment and participation of local stakeholders is the key to evaluation success. Both the WHO (1998) and Kopczynski and Pritchard (2004) strongly recommend the participation of community members (target group) and key stakeholders in the evaluation of a health promotion programme for the enhancement of the usefulness and utilisation of the evaluation results. Key stakeholders are those that are affected by or involved in the programme at hand (Patton, 1997) or as stated by Rossi *et al.* (2004) those that will use the evaluation outcomes.

Evidence indicates that key stakeholder participation will even improve the quality, relevance and credibility of evaluation results (Butterfoss *et al.*, 2001; WHO, 1998). It will not only increase their sense of ownership in the evaluation process and the results, but will also avoid surprises when the final report is disseminated (Patton, 1997). According to the WHO (1998) it also "helps to foster the process of empowerment and build stake-holders' capacity to address health needs, thus giving them more control over the factors affecting their health". Considering this, Reineke (1991) suggests identifying key stakeholders at the programme outset, to involve stakeholders right after identification and keep them continuously and actively involved. Asking them to address design issues, helps to draft surveys and provide input to the final report and/or other dissemination activities.

2.2.3. *Programme Description*

To evaluate a programme it is important to tailor the evaluation plan to the programme and its context, and when necessary revise and modify the plan along the line (Rossi *et al.*, 2004; Holden and Zimmerman, 2006). A theory-based evaluation uses a programme theory for the formulation and prioritisation of the evaluation questions, the design of the evaluation research and the interpretation of the evaluation findings (Weiss, 1997; Potvin, 2001; Rossi *et al.*, 2004; Goodman, 1998). A programme theory

expresses beliefs and assumptions underlying the intervention and the intervention activities (Weiss, 1997).

To create a programme theory, the logic model approach might best be used. A logic model is a graphic representation of the programme at hand and the outcomes to be achieved. A logic model helps to make important elements of the programme visible, represents the demonstrated or hypothesised causal relationships between concepts such as input, programme activities, programme output, and outcome and asks the right evaluation questions (Bartholomew *et al.*, 2006; McLaughlin, 2004). Although logic models can take many forms, the basic features are (Figure 1):

- Resources or input: all resources or input required to support the programme, such as funding, partnerships, network, policy, knowledge, materials;
- Activities: all of the action steps needed to produce programme output (information, community development, advocacy, intersectoral action);
- Outputs: everything directed at the costumers or target population such as communication materials, courses, services;
- Costumers: the target population;
- Outcomes: changes resulting directly from activities and programme outputs. Some of the changes are visible or detectable during or shortly after the interventions. These are called short-term outcomes. The intermediate outcomes are a direct result of these. The longer-term outcomes take a longer time to measure. Most of the time this is the health problem at hand.

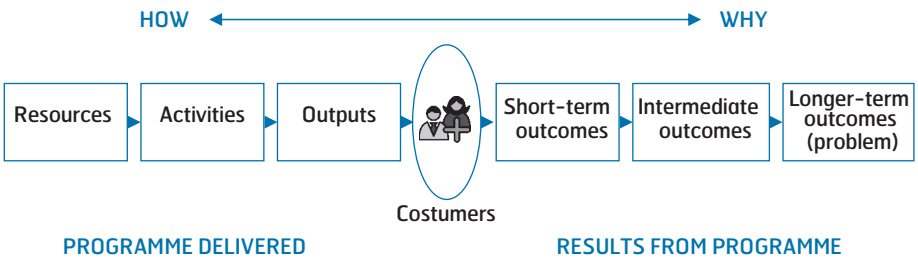

Figure 1: Basic Logic Model (derived from McLaughlin, 2004)

For the construction of the logic model or the programme theory, it is important to involve key stakeholders (CDC, 1999; Rootman, 2001). These stakeholders also include the target group at stake and the programme planners (Rootman, 2001). Involvement of these people will "ensure commitment, use of information generated and a good response to questionnaires" (Springett *et al.*, 1995).

2.2.4. *Programme goals and objectives*

The evaluation is more likely to be successful if there are clearly defined feasible programme goals and objectives (Nutbeam, 2006; Anspaugh, Dignan and Anspaugh, 2000; Healey and Zimmerman, 2010). A programme goal is usually defined as the future outcome of the programme; it is a long-term goal and includes those affected by the CBHP (Anspaugh, Dignan and Anspaugh, 2000; Healey and Zimmerman, 2010). To achieve this programme goal, smaller steps are needed; these are called programme objectives. These are measurable actions and should include who is involved, what the desired outcome is, how progress will be measured and the timeframe for achievement (Healey and Zimmerman, 2010).

When identifying objectives, the SMART acronym is generally accepted as a handy check list, to see if the objective is a good objective. SMART stands for "Specific, Measurable, Achievable, Realistic and Time-Bound":

- Specific: clear about what, where, when, and how the situation will be changed;
- Measurable: able to quantify the targets and benefits;
- Achievable: able to attain the objectives (knowing the resources and capacities at the disposal of the community);
- Realistic: able to obtain the level of change reflected in the objective;
- Time-bound: stating the time period in which they will each be accomplished.

Also the use of "strong" verbs is suggested. A strong verb is "an action-oriented verb that describes an observable or measurable behaviour that will occur" (Rossi *et al.*, 2004). Examples of strong verbs that can be measured are: to increase, to make, to organise.

2.2.5. *Evaluation questions and design*

As the programme theory is made and the aims of the programme have been consented on, the evaluation questions need to be specified (CDC, 1999; Rootman, 2001; Holden and Zimmerman, 2009). Evaluation questions are developed by the programme evaluator and key stakeholders. The questions define issues the evaluation will investigate (Rossi *et al.*, 2004). Both Thompson (1992) and Rossi *et al.* (2004) suggest evaluation questions generally belong to an evaluation form: questions about programme operations, implementation and service delivery belong to the process evaluation; questions that address the programme outcome and impact belong to impact or outcome assessment; and questions about the programme cost and cost-effectiveness belong to efficiency assessment.

When key stakeholders have not been involved in compiling the evaluation questions, then that evaluation would not be responsive to stakeholders concerns, would not be used and might even be attacked as irrelevant (Rossi *et al.*, 2004). Evaluation questions must be reasonable, appropriate and answerable. Rossi states that "it is gene-

rally better for an evaluation to answer a few important questions well than a larger number poorly" (Rossi *et al.,* 2004).

The evaluation of a comprehensive community health promotion programme can be made as extensive as possible. One can reason that the choice of an evaluation method for a certain programme depends heavily on the knowledge and skills available within participating organisations, programme planners and trained evaluators. The choice of research design depends on the availability of (trained) professionals to collect and analyse data and on sufficient budget for the evaluation research (Rossi *et al.,* 2004; Goodman, 1998).

Randomised Controlled Trials (RCT) are usually considered the gold standard methodology for building a solid evidence base for effectiveness of prevention strategies. And although RCTs offer, theoretically, the best potential to be free from bias, they may not be best suited for conducting and evaluating complex and multifaceted health promotion interventions based on population health principles (Green and Kreuter, 1999; Lobstein, Bauer and Uauy, 2004; Nutbeam, 1999). Using a RCT as a research design for a comprehensive community-based health promotion approach is almost impossible and too restrictive. Not only is this because of ethical reasons, after all a part of the community needs to be excluded from the programme, but it will also create logical and organisational problems in the implementation phase of the programme (Nutbeam, 1998). Which mass media instrument can be used to reach only half of the community? And how can we explain to some members of the target group that participation in offered activities is not allowed?

A solution for these problems might be the randomisation of towns or communities instead. This experimental design is called a Community Intervention Trial or CIT (Mackenbach and Gunning-Schepers, 1997). Some evaluators mean that at least 10 communities need to participate per study to obtain sufficient statistical power in order to detect any differences (Koepsell, 1992; Hancock *et al.,* 1997). To find enough communities that resemble each other is one challenge, to get them to participate is another. Not only do financial issues play a part in the possibility of participation, but logistics and political factors are also of influence (Koepsell, 1992; Murray, 1995). Another problem when using the RCT or CIT design for evaluating the effects of a comprehensive CBHP is the enormous variation of factors influencing the target group when using a multi-component approach. Finding a causal relationship between these variables is then difficult, because of the labelling of dependent and independent variables (Nutbeam, 1999).

Even a community comparison with randomisation has its pitfalls because there is still the possibility of contamination of the control towns. Examples of studies that are suggested to have had problems with contamination of the control group are the Finnish North Karelia Programme, the Heartbeat Wales case study and the California Healthy Cities project (Kegler, Twiss and Look, 2000; Nutbeam *et al.,* 1993). It has

been suggested that this contamination has resulted in smaller changes in effect between the intervention and the control group.

A time-series design (also considered quasi-experimental) in which multiple measures are taken at different points of time before, during and after the intervention, might show whether the project has made a difference to the prevailing trend in the population. The Brazilian Agita Sao Paulo programme, a CBHP programme to promote physical activity in the Sao Paulo region, measured change in the population with a pre-test–post-test at both individual as well as organisational and policy level (Matsudo, 2006). Considering this, Nutbeam *et al.* (1993) suggest "balancing the measurement of outcome with an assessment of the process of change in communities" and promote "to develop and use intervention exposure measures together with well-structured and comprehensive process evaluation in both the intervention and reference areas". The use of a reference area of course does depend on the available resources.

2.2.6. *Data collection*

When evaluating a CBHP programme, it is important to use a mix of data collection methods and to contour evaluation instruments to each individual community (Goodman, 1998). This mix needs to consist of both quantitative and qualitative methods to provide evidence of success as well as insight into the process (Goodman, 1998; Nutbeam, 2006; Rossi *et al.*, 2004; De Vries *et al.*, 1992; WHO, 1998). Examples of quantitative methods are written or telephone surveys, counting the number of participants, measurements of weight, height and waist circumference. Qualitative measurements are observations, interviews, analysis of meeting minutes, and the use of photographs to visualise change.

A method to reduce the chance of making non-systematic errors and to improve confidence in research findings and evidence is data triangulation (Nutbeam, 1998). Triangulation is the use of multiple data sources or methods to measure the same indicators or variables (Goodman, 1998; Nutbeam, 1998).

2.2.7. *Dissemination and evaluation budget*

Policymakers and politicians need positive data to continue programme support and funding. This data should be made as explicit as possible and as early in the diagnostic and evaluation process as possible (Green and Lewis, 1986). And although some stakeholders do not possess a great deal of official power, they might be members of agencies or influential groups and act as pressure groups to policymakers and the general public. Communicating with such people can often reduce anxiety, minimise programme subversion and provide a helpful channel of communication for information (Green and Lewis, 1986). Therefore it is important to send out progress reports or newsletters to relevant stakeholders during the programme.

Communicating the outcomes at regular intervals enables data collectors, action animators and the organisation of an activity to see quick results of their work. Right after an activity, a short description of this activity with the number of participants and participants' quotes should be communicated through the community (Kopczynski and Pritchard, 2004). The use of local media and the Internet is indispensable.

It is also suggested that 10-15% of the programme budget (time and money) should be directed to the evaluation (Kopczynski and Pritchard, 2004; WHO, 1998). When this is not feasible for the local project manager, volunteers, such as students, can be asked to conduct interviews, count participants at activities or retrieve data from existing systems and to analyse these as part of an internship. Supportive in conducting an evaluation is the provision of examples of evaluation methods. For instance, how can we measure the reach of an activity without actively counting all the participants? Everyone who enters receives a coffee ticket, counting the remaining tickets will give the number of participants.

2.3. Measurement of overweight

One of the goals of the Scientific Evaluation and Dissemination (SED) committee is to provide indications on how to evaluate and monitor EPODE on a large scale. According to the United Nations Populations Fund (www.unfpa.org/emergencies/manual/9.htm), critical elements of a monitoring system are: definition of essential data to collect and a systematic collection of data. Therefore here an overview is provided of the most optimal way for assessing overweight and obesity in children and recommendations will be given on how to convince parents for the participation of their children in mentioned measurements without stressing them.

Overweight and obesity refers to an excess of body fat and there are many methods available to access body fat in children. However, BMI adjusted for age and gender (IOTF cut-off values/ WHO charters) is internationally recommended as a practical estimate of overweight in children since it is easy to obtain, it has a strong correlation with body fat percentage, a weak association with height, and it has the ability to identify individuals with acceptable accuracy (Cole, 2000). However the BMI should be interpreted with caution since it is not a direct measure of body fat. Referral to an appropriate specialist should be considered for children who are overweight or obese and have significant co-morbidity or complex needs (for example, learning or educational difficulties).

It is recommended for studies to use validated methods for the estimation of body fat and they should also assess the benefits of measures additional to BMI such as waist circumference and skinfold thickness, due to the incompleteness of BMI. However attention should be given to the methods of assessment when measuring body fat since the accuracy of the anthropometric measurements depends strongly on the

skills of the measurer and the precision of the measuring equipment. Therefore the use of (inter)national guidelines/protocols and trained personnel are recommended.

It is very important to use graded classification of overweight and obesity since it permits meaningful comparisons of weight status within and between different population groups, or monitoring a population over time, as well as providing a firm basis for the evaluation of interventions (Seidell, 2010). However at the moment more research is needed on the best way to measure overweight and obesity in children, including validation of international standardised cut-off values.

Besides a standardised overweight and obesity assessment for children, parent's involvement in the intervention and measurement of the child is also of key importance. According to Snoek *et al.,* 2010, it is recommended to provide parents with information, skills and parental empowerment in combination with an education course on how to provide children with a healthy lifestyle for a successful involvement of parents in the prevention of overweight and obesity in their child.

2.4. Conclusion

Community-based Health Promotion (CBHP) tries to change health-related behaviour within members of a community. Many kinds of institutions, organisations, and groups are included in the delivery of a variety of reinforcing interventions. CBHP has a large scope and magnitude, requires much planning and coordination and needs large human and financial resources.

Important elements of a CBHP are participation, empowerment, capacity building, multi-sectoral collaboration, social network approach and the mix of interventions. The evaluation of CBHP is challenging. It needs to be tailor-made to the programme which can be made as extensive and broad as resources allow. The evaluation of a community-based health promotion intervention should combine both a process and an effect evaluation and should use a quasi-experimental time-series design capturing the change at both the individual and environmental level, when allowed by resources compared by a control community.

Leading in the construction of an evaluation plan are the SMART programme goal(s), programme objectives, resources and stakeholder needs. A programme theory is the first step in creating an evaluation plan or evaluation framework. Involvement of key stakeholders in compiling the evaluation questions will see that these are responsive to stakeholders' concerns and support use of the results. It is advised to use a mixed method approach and to use key stakeholders in the data collection and focus not only on the outcome to measure effectiveness but also on impact and process evaluation. It is suggested to use a pre-and-post-test design to measure the change in the behaviour of the individual and within the community. The use of a control town, however not necessarily randomised, is advised when allowed by time and resources.

To assess overweight and obesity in children, it is advised to use a graded classification of overweight and obesity specified for children such as the internationally recommended IOTF cut-off values as a practical estimate of overweight in children. It is recommended to provide parents with information, skills and parental empowerment in combination with an education course on how to provide children with a healthy lifestyle.

3. Construction of the EPODE evaluation framework

As emphasised in the previous part, an evaluation framework for a comprehensive programme such as EPODE needs to be tailor-made to the programme by programme management and stakeholders. It is important that the evaluation meets their needs and the needs of the target group and is not prescribed from central or national level. To optimise the process and the targeted results, the evaluation of a CBHP programme includes both a process and an effect evaluation.

3.1. Engagement of stakeholders

At the start of programme evaluation, relevant professionals and stakeholders need to be identified and their evaluation needs described. Since EPODE will be implemented in countries and cities that differ in organisation, actors and context, the identification of stakeholders should be conducted by programme management in each EPODE community. Some important key stakeholders are the central coordination team, researchers, policymakers, community members and local stakeholders and programme funders.

3.1.1. *Central coordination team*

The central coordination team will be interested in the effectiveness of the implementation at local and national level. First, they might like to know whether or not the set programme goals have been achieved and what the strong and weak elements of the programme are. Secondly, since the central coordination team must account for costs of the programme to financiers, they will have an interest in the (monetary) costs of national and local implementation. And thirdly, they will be interested in the necessary changes in the local physical and social environment to accomplish the decrease of the prevalence of obese children in a participating community. It is important to realise that this is a question of large magnitude and difficult to measure.

3.1.2. *Researchers*

The participating researchers within the scientific committee and participating organisations such as universities and research centres are interested in all knowledge that submits to scientific knowledge, such as effects of the total programme and its contributions on behaviour and health. By learning more about the working elements of the programme, researchers can (re)develop or optimise the programme. Secondly it would be interesting

to gain insight into the costs of the programme, more specifically the economic investment, associated with an intervention, compared with the health impacts, such as cases of disease prevented or years of life saved. It is realised that the latter is also a question of large magnitude and difficult to measure. Thus in the EPODE evaluation framework this evaluation question will not be taken into account. However, costs generated by EPODE at a central level (activities of the coordination team) and at a local level (additional staff costs for the town, printing of materials, etc.) will be monitored so in due time this evaluation question might be analysed with the demographic data available at that time.

3.1.3. *Policymakers*

Policymakers make binding decisions about the programme's initiation, budget, demise or continuation, and they need to be accountable for these decisions (Green and Lewis, 1986). So in short, national and local policymakers and strategists (politicians) want return for their money. They would like to know whether the intervention was worth their money. And since their money is actually the public's money, to them it is important whether or not the programme has been visible and of interest for the public. A key evaluation question would therefore be: does the public know the programme and are they satisfied with the programme? This relates to the effect of the communication materials and the use of the intervention mix. The interviewed French representatives confirm this and would like to know whether or not the programme's goals and objectives, preferably at health outcome level, have been achieved and if the programme is known and appreciated by the population.

3.1.4. *Community members and local stakeholders*

Within this research there was insufficient time and funding to talk to representatives of the public in EPODE communities. And, although very generic, in literature information has been found on community members' evaluation questions. The members of the community would like to see the effects of their participation (Healey and Zimmerman, 2010). Did their participation in the programme lead to a change in prevalence of overweight or obese children, did their participation lead to changes in governmental and organisational policy, did their participation lead to a change in the offer of health-related activities in their neighbourhood or city, and did their participation lead to an improvement in the programme methodology itself (Healey and Zimmerman, 2010).

Another group that will be interested in the results of the EPODE programme are the local stakeholders, such as general practitioners, shop owners, local producers, health professionals, infancy professionals, facilities, schools, school catering, extra-curricular activity centres and the media. These stakeholders will be interested whether their input in the programme had any effect on the children; did a change of services in the community occur; is there a noticeable larger or more segmented offer of interventions and how successful are these changes in the solution of the prevention of overweight and obesity (Healey and Zimmerman, 2010).

3.1.5. *Programme funders*

The funders of the programme, such as local government and public and private partners, will be interested whether their participation contributed to the achievement of the programme goal and to the consistency with the National Health Policy. Furthermore private partners are interested in the effects of the participation on consumer trust and advocacy in the company and its products. Did the participation improve the company's image, did it buy loyalty? Did policy, practice and reputation of the private partner match with the EPODE mission and strategic goals? Especially when participating with a private partner, it is important to make clear beforehand who will conduct the evaluation to retrieve this specific information. In the framework described in this report, this specific customer-oriented evaluation question will not be taken into account for most private companies have their own consumer trust measurements (Healey and Zimmerman, 2010).

Participation of interested parties in the evaluation plays an important role in the participation, empowerment and capacity building of the community and as such it contributes to the success of the programme. In light of this section, it is therefore important to discuss the evaluation with the interested parties. In this discussion the following elements must be taken into consideration:

- clarifying the need of the evaluation;
- when do the interested parties consider the programme to be a success?
- identification of the evaluation questions.

3.2. EPODE Programme theory

The next step in creating an evaluation framework is the construction of the programme theory.

EPODE is a four-level programme, namely: the level of the central or national organisation, the level of local organisation, the settings level and the child level. Each level provides input for the next level. And output or outcomes on each level should reflect and provide feedback to the performance of the implementation (activities and input) of that level or of preceding levels (Figure 2).

The central level comprises the central organisation of the programme. This so-called central coordination team is responsible for the central (national or state-wide) coordination and dissemination of the programme, societal and political agenda setting, public and private funding of the programme implementation and coordination, creation of communication materials, evaluation of the programme, the scientific substantiation and recruitment of new cities. The content of the training and information materials such as toolkits, roadmaps and activity cards are made in consultation with professionals in the field of nutrition, physical exercise, behavioural science and paediatrics assembled in the scientific committee.

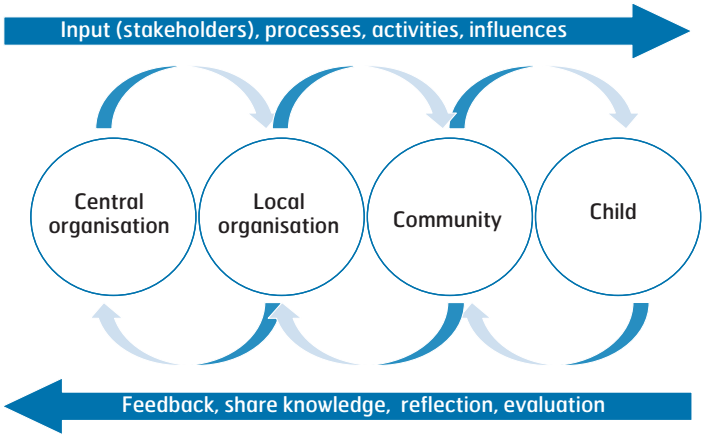

Figure 2: Model with activity levels of EPODE

The local organisation level comprises all activities and actors needed for the local implementation and coordination of EPODE. These activities are mostly carried out by the local project manager and the local authority leader or people's representative and in due course supported by local key stakeholders. The activities include:

- the assembly of a local organisation team with local supportive professionals (known as stakeholders);
- the advocacy and lobby of the programme and programme goals with other policymakers and local politicians;
- activities directed at community capacity building through building knowledge, support networking, stimulate stakeholders in active participation in implementation and evaluation and securing resources (means and people);
- spread of communication materials through the community for change in cognition of the target group and their social system;
- the organisation of nutritional and physical activities directed at the target groups etc.;
- the involvement in the evaluation at local level.

The implementation of the activities directed at the children, parents and members of the community takes place at different settings, namely neighbourhoods, schools and at home. The activities are not only directed at the promotion of healthy nutrition and physical activity but consist also of interventions to change the direct social and physical environment of the child. The social environment comprises family, friends and teachers.

The physical environment is the neighbourhood in which the child lives, with streets, shops and playgrounds and the school he/she attends. The programme goal of EPODE is directed at changes within the child, therefore the last level places the child at the

centre. It is about his attitude, knowledge, skills, behaviour and the final outcome of the programme: a healthy BMI of the child.

To gain insight into the mechanisms of each of the four levels, a logic model approach was used on each of the four levels. Each level followed the logic model of input, activities and output; finally resulting in the long-term outcome at child level: a healthy BMI. This visualisation is represented in Figure 3.

Within this visualisation the four levels can be considered as dependent units within the programme, each level serving as input or context for the subsequent level. As such, any possible interconnections between elements of the programme could be displayed. This would provide more insight into the necessary recourses and activities for outcome achievement of the programme.

Information from the interviews and documents was placed within the EPODE multilevel approach (Figure 3). The completed EPODE multilevel approach (Van Koperen *et al.*, 2010) comprised 85 elements divided between input, activities and output/outcome in the four levels. This model provides a complete overview of all the resources and processes needed to see effects at child level. Considering financial resources, available knowledge and time on the level of local and national organisation, the evaluation of all these elements and its indicators is beyond EPODE evaluation possibilities.

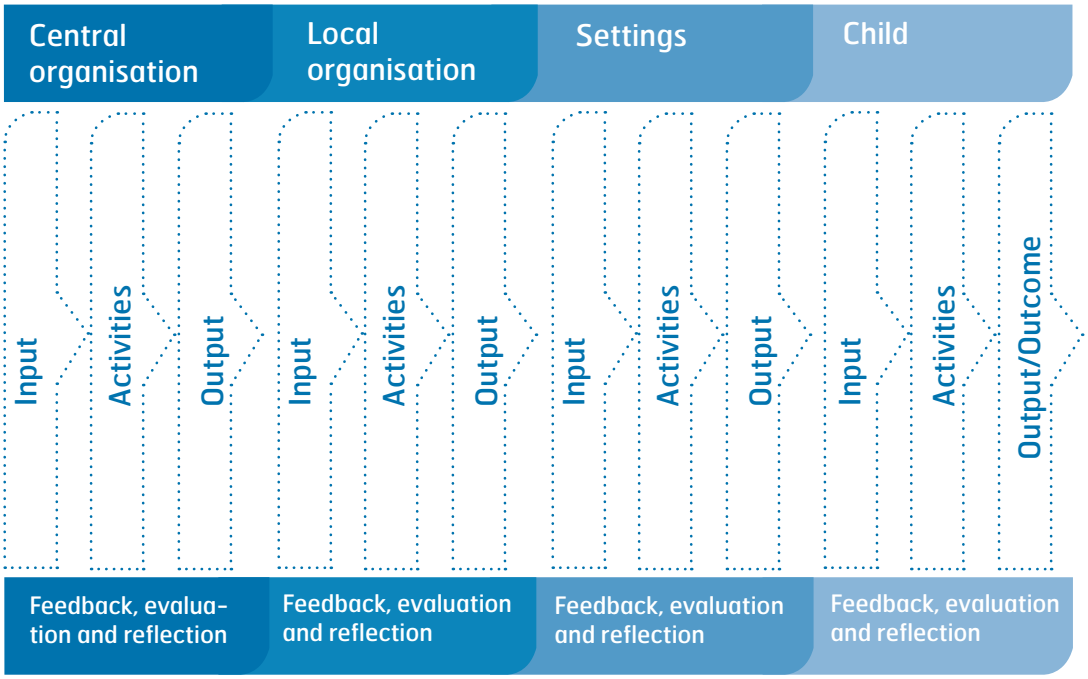

Figure 3: EPODE multilevel approach

After consultation with the EEN Scientific Advisory Committee, it was decided that the completed EPODE multilevel approach needed to be compressed and refined and that the EPODE pillars (political commitment, public-private partnership, social marketing and monitoring and evaluation) needed to be incorporated and placed between central organisation and local organisation. In a process of deliberation and logic reasoning the research group and experts in community strategy evaluation designed the programme theory of EPODE (Figure 4). This process needed several group and individual meetings.

The EPODE programme theory incorporates the four EPODE pillars, starting on the left hand with the central coordination and ending on the right with the long-term outcome, a healthy BMI for children. The programme goal of the EPODE community intervention is to reduce or stabilise the prevalence of overweight or obese children. To achieve this, behavioural change is encouraged for children, i.e. increase the liking and practice of outdoor physical activity and taking healthy fruit to school. Behavioural change is expected to be achieved by changes in psychosocial and cognitive determinants of risk behaviours such as knowledge, skills and attitudes. In addition, the social and physical environment is believed to be important in achieving behaviour change at an individual level. Nutritional and physical activities are primarily directed at the children, with spill-over effects to parents.

All activities used are evidence-based; a scientific committee reviews new developed activities. EPODE organisation and implementation are based on community-based health promotion principles (Bracht and Kingsbury, 1990; Minkler and Wallerstein, 1998), i.e. participation of local stakeholders in the planning and implementation of the project, multi-sectoral collaboration between local organisations, sustainability of the project, a social network approach (i.e. spreading information from network members to other network members), a multi-media and multi-method strategy (i.e. using various communication channels and educational strategies), environmental changes (e.g. more or better walks, healthier foods in school canteens and healthier food promotion in shops), and activities tailored to various target groups.

The key-element "Local organisation" combines the local team and the steering committee; it contains leadership, organisation, network and partnerships, knowledge and expertise at local level. Local organisation is supported by political commitment, public and private partnerships and social marketing principles. Hence it can work on the advocacy, community capacity building and nutritional and physical activities.

Within the key-element "Advocacy" are the activities that improve healthier organisational priorities, activities and policies. The local programme coordinator and the local team have an important role in this and will use social marketing strategies for this. Securing resources (money and time), organisational relationships and functions, skills and knowledge and the use of media are placed under the heading "community capacity building". "Nutritional and Physical Activities" contains the activities,

social marketing (materials and methods) and bigger community events directed at the target group in order to realise a healthier behaviour by providing skills, knowledge, changing beliefs and raising awareness.

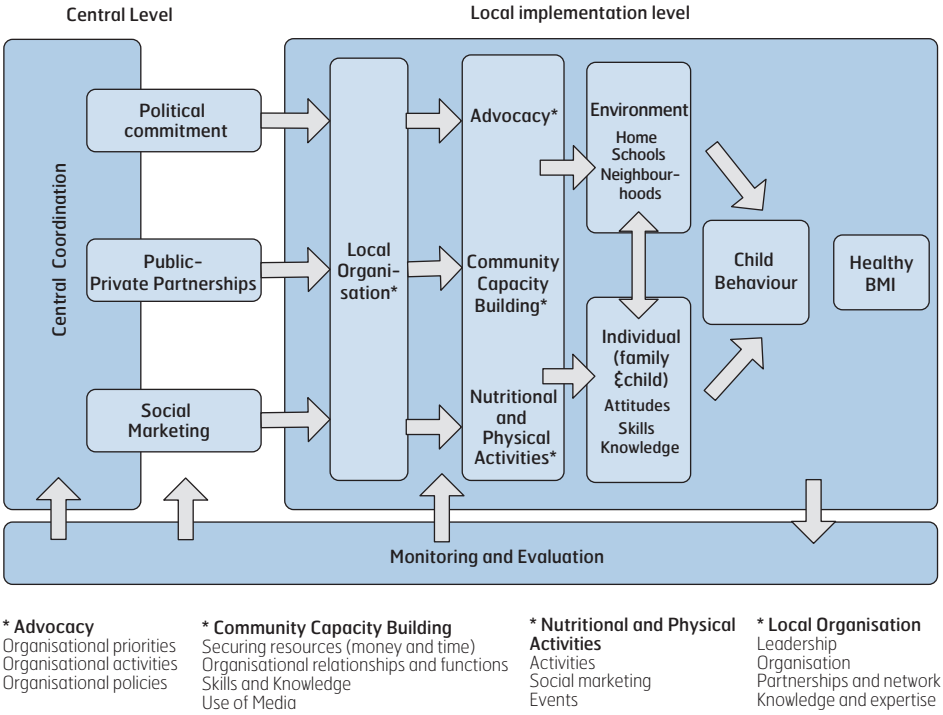

Figure 4: EPODE programme theory

The central coordination element includes the work of the central coordination team on each of the four pillars and the programme organisation, implementation and dissemination. Activities consist of human and financial resource mobilisation, advocacy, agreement with towns and scientific expertise, initial and continuous training and coaching sessions, development of materials, permanent communication and the coordination of the evaluation framework. To evaluate the success of the programme and for programme improvement, all these elements need to be evaluated. This is represented by the pillar scientific evaluation and dissemination.

4. Recommendations

At the start of the EPODE programme, a project plan needs to be written. This project plan should consist of a plan the programme is to carry out and the theory behind it. It is advised to use the EPODE programme theory, as described in this research, as a guideline to describe the specific process, the (programme) objectives and the

process-oriented objectives. A project plan contains concrete programme objectives and short-term objectives (these should be specific, measurable, attainable, relevant, time-bound; SMART), an evaluation plan, a communication plan, a planning session, a description of the activities to be carried out, an implementation plan (who does what and when), a budget, a description of the project organisation and project supervision and go-no-go moments should be appointed.

4.1. The evaluation plan

The evaluation plan is a part of the project plan. An evaluation plan should consist of the following components:

1) a description and reference of the target group of the programme;
2) programme objectives and short-term objectives;
3) evaluation questions;
4) evaluation method;
5) time plan of the evaluation;
6) organisation of data collection and analysis;
7) budget;
8) dissemination.

Ad 1. A description and reference of the target group of the programme

The end target group of EPODE are children between 2 and 12 years old. But to reach these and to change their environment, activities should be directed at parents and stakeholders as well. Therefore it is suggested to describe each target group of the programme, e.g. parents of children between 2 and 12 years old, teachers of these children, health professionals, governmental officials, directors and policy makers of public organisations, private parties, etc. It is suggested to mention the boundaries of the community, e.g. a geographical area.

Ad 2. Programme objectives and short-term objectives

Discuss the programme objectives and the short-term objectives with policy makers, management and the politically responsible. What would we all like to achieve at the end of the programme. Objectives must be SMART, therefore specific, measurable, attainable, relevant and time-bound.

A programme objective is frequently aimed at health profit. An example of a programme aim is:

- The prevalence of the number of children between 2 and 12 years old who are overweight or obese will be reduced by 2% by the end of 2015.

Including secondary objectives to the main objective will facilitate the evaluation.

The short-term objectives should focus on behavioural components of the individual and context. At the individual level, focus should be on positive results in behavioural modification or changes in attitude, knowledge, skills and beliefs. Examples are:

- by the end of 2014 the number of children that are not a member of a sports association has been decreased by 12%;
- by the end of 2014 there has been a significant increase in the number of young people that meet the physical activity guidelines;
- by the end of 2014 the number of children that spent less than 1.5 hour a day actively playing will decrease significantly;
- by the end of 2014 the number of children that do not eat fruit and vegetables each day will decrease significantly;
- by Mid-2012 80% of the children (8-12 y) know they must eat two pieces of fruit every day;
- by Mid-2012 80% of the children (8-12 y) are aware of the importance of having breakfast at least 5 days of the week.

For context, focus on the organisation (participation, lawsuit delivery and capacity building of stakeholders and number of and the range of the activities) and environment (the social and physical environment of the child). Examples are:

- Mid-2012 75% of the relevant local and regional organisations that are concerned with overweight prevention, have been involved actively in the set-up and implementation of EPODE;
- Mid-2012 90% of the target group has heard of the EPODE programme;
- Mid-2012 more than 75% of the target group has participated in the EPODE activities.

A lot is still unknown about the functioning of an integrated community intervention like EPODE. But the BMI results of the FLVS study (Romon, 2008) and the French EPODE pilot towns (Romon *et al.*, 2010) can be used for reference. Standards for environmental and behavioural changes can be found in similar previously carried out programmes. The results and aims achieved by these programmes can help to determine specific feasible objectives.

Short-term objectives on an organisational level should focus on the number of organisations participating in the programme execution, the reach of the communicational expressions and/or placing overweight prevention onto the political or policy agenda of other municipal sectors. Environment-specific objectives could for example be changes in schools (promotion of healthy treats in school policy), attention to food and physical activity at home or increased access to physical activities and community playgrounds.

Ad. 3. Evaluation questions

Evaluation questions are developed by the programme evaluator and key stakeholders. The questions define issues the evaluation will investigate (Rossi *et al.*, 2004). Both Thompson (1992) and Rossi *et al.* (2004) suggest evaluation questions generally belonging to an evaluation form:

- questions about programme operations, implementation and service delivery belong to the process evaluation;
- questions that address the programme outcome and impact belong to impact or outcome assessment;
- questions about programme cost and cost-effectiveness belong to efficiency assessment.

When key stakeholders have not been involved in compiling the evaluation questions then that evaluation would not be responsive to stakeholders' concerns, would not be used and might even be attacked as irrelevant (Rossi *et al.*, 2004). Evaluation questions must be reasonable, appropriate and answerable. Rossi states that "it is generally better for an evaluation to answer a few important questions well than a larger number poorly" (Rossi *et al.*, 2004).

An evaluation is on the one hand conducted by the defined objectives and on the other hand by the evaluation questions. The participating groups in the EPODE programme all have their own ideas concerning when the programme is successful. This determines what knowledge they would be interested in gaining from an evaluation.

For children, for example, the programme is a success when they get a new playground, or when they can practice more sports during school hours. For parents, on the other hand, the programme is successful when they see their child becoming healthier and more physically active, when they learn to cook good and healthy food, or when a playground is built on a convenient location so their kids can go there by themselves. A supermarket or greengrocer would like to see their turnover increase, so when the EPODE programme would do that, for them the programme could be considered a success. A policy employee in the sport or public health sector is satisfied by achieving the programme objectives, but also by improving the cooperation with other municipal policy domains and extension of the budget for continuation of the programme. Which role could, and would, the interested parties like to play in the data collection? Suggestions for the evaluation questions of EPODE are discussed in Table 1.

Table 1: Examples of evaluation questions

Question focus	Key evaluation questions
Process evaluation	- Has the EPODE programme been implemented on a local and central level as intended, using the methods and materials as designed? - Was the designated community (local government, stakeholders, inhabitants and children) satisfied with the programme? - Was the local project manager satisfied with the programme? - How effective were contracting arrangements between the central coordination and other parties, to support programme implementation and evaluation? - How can the programme be improved?
Impacts and outcomes	- Have the programme's goals and objectives been achieved? - How well did the programme contribute to a stabilisation or decrease in the prevalence of overweight or obesity in children between 2 and 12 years old and living in the designated community? - What unanticipated positive and negative outcomes have arisen from the programme? - What proportion of the target group (children 2 – 12 years living in the designated community) has been reached by the programme? - What are the monetary costs of both central and local implementation of the EPODE programme? - How many of the local stakeholders within the community have been recruited for participation in the programme and did this participation result in changes in the offer of health-related activities in the designated community and of formal changes in governmental and organisational policy?

To answer the evaluation questions as described in Table 1, it is advised to measure a set of core elements at baseline and at subsequent points in time. Suggested measurements can be divided into essential and desirable measurements (Table 2). The desirable measurements depend on the availability of resources in the community. The essential measurements are more or less required components for all EPODE communities. Measuring these will make comparison between EPODE communities possible and is important for improvement of the programme and the visualisation of the programme results. It is to be noted that the list of suggested measurements should be tailored to each community depending on stakeholders needs and resources.

Table 2: Suggested measurements for EPODE communities

	Essential measurements	Desirable measurements
Demographics of child		
Age	X	
Sex	X	
School attending	X	
Neighbourhood		X
Ethnicity		X
Disability	X	
Socio-economic status (income and education parents/guardians)	X	
Baseline data child		
Height and weight (to calculate BMI)	X	
Waist circumference		X
Skinfold thickness		X
Measures of dietary intake and behaviour	X	
Measures of Physical Activity (PA) levels and behaviour	X	
Measures of attitude, beliefs, knowledge and skills re. dietary intake and PA (representative sample of target group)	X	
Baseline data community (community assessment)		
Number of inhabitants (age, sex, socio-economic status (SES))	X	
Number of people mildly to severely overweight (BMI)		X
Number/description of services (e.g. healthcare facilities, schools, sport facilities, shopping areas, fast-food restaurants)	X	
Number of memberships of sport facilities (age and sex)	X	
Number of leisure areas, playgrounds and parks (% of total community space)	X	
Description of similar (previous) programmes in the designated community		X
School and local government policy regarding dietary intake and PA		X
Community attitude, beliefs, knowledge and skills (representative sample)		X
Number and percentage of overweight children referred to a physician		X

	Essential measurements	Desirable measurements
Process evaluation per activity (PA, dietary intake, capacity building and trainings offered by central coordination team)		
Description of activities: Activity timescale (exposure, quantity and duration) Activity delivery dates Location, setting and provision of transport (if applicable)	X	
Number invited/recruited	X	
Number attending and completed	X	
Reasons for drop-out		X
Satisfaction of participants (child and members of local organisation) (recruitment method, used materials and guidance, understanding, attractiveness, empowerment, knowledge building, attitude)	X	
Satisfaction of parents of offered PA and dietary intake activities (recruitment method, used materials and guidance, understanding, attractiveness, empowerment, knowledge building, attitude)		X
Organisational process evaluation (per national and local organisation)		
Detailed breakdown of costs (people and means)	X	
Number of organisational meetings (invited, attending, satisfaction)	X	
Media exposure		X
Satisfaction of local project manager (quality of guidance, offered and used methods and materials, training, leadership, network, collaboration, resources, knowledge and expertise, organisation of activities)	X	
Satisfaction of stakeholders (recruitment, methods and materials, training, organisation, possibilities of involvement, local project manager)	X	
Satisfaction of central coordination team (implementation and dissemination, funding, partnerships, developed methods and materials, media exposure, national policy support, knowledge and expertise)	X	

	Essential measurements	Desirable measurements
Number of national and local stakeholders participating (attending national and local meetings, disseminating materials, organising activities, funding)	X	
Plans for sustainability		X
Number and description of advocacy activities (by community champion, local project manager, representatives)		X
Impact/outcome evaluation		
Child demographics: Min. of two follow-up points incl. at two years and four years (incl. additional proxy measures if collected at baseline)	X	
Child behaviour: Min. of two follow-up points incl. at two years and four years	X	
Community assessment: Min. of two follow-up points incl. at two years (measurement of change)	X	
Awareness of the programme (child and community)	X	
Measurement of changes in social and physical environment that stimulate healthy dietary intake and PA		X
Details of any unexpected outcomes and/or deviations from the intended intervention design and the reason why		X

Ad 4. Evaluation method

Describe, per objective, the way in which they should be evaluated (process, short-term outcome and outcome evaluation), what should the measurement points, the measuring devices and the method of data collection be? Make an array in Excel for a good overview.

Measurement points:

- make a plan consisting of the measurement points of the process-, short-term- and outcome evaluation);
- discuss the practical possibilities of measuring height and weight and waist circumference of the target group;

- discuss the measurement sites, measurement points, the way to list the collected data, link questionnaires to these measurement points and the reporting. Divide tasks and assess education needs;
- take into account the duration of the programme, planning of programme activities and possible stakes of externals (consultants, interested parties, trainees).

Data collection:

- use both qualitative (interviews, focus groups, district observations, document analysis) and quantitative (measuring length and weight, counting people, reach, questionnaires) data collection methods;
- important in data collection among children is the informed consent. Give parents a written explanation concerning the programme set-up and request written approval to weigh and measure the child;
- keep a log in which the activities are described at organisational level. This log can be very small and give insight later into what happened during every phase of the project. Appoint in a notebook for example every day what you have done, whom you have spoken to, what the result was and who agreed to do what. Pay attention however: this is not a to-do list but a log!

Ad 5. Time plan of the evaluation

Beside the time plan concerning the moments of evaluation, an overview of all evaluation activities is also necessary. Make a time schedule in which the following components are included; preparatory phase, consultation moments, construction and collection of measuring devices, data collectors instruction, measurement points, analysis, consultation with stakeholders concerning preliminary results and of course the process evaluation of the organisation of the evaluation (what went well, what could have been done better). The demographics of the child and child behaviour are advised to be measured at baseline, at 2 years and at 4 years after the start of the programme. The community assessment should have a minimum of two follow-up points including at 2 years (measurement of change) after the start of the programme (Van Koperen, 2010).

Ad 6. Organisation of data collection and analysis

Stipulate, in consultation with the stakeholders, who supplies which data, how this data will be collected and by whom, and who will analyse the data (see also point 3 and 5).

Ad 7. Budget

Determine the budget for monitoring, evaluating and analysing. A first rule is to reserve 10-15% of the total programme budget for evaluation activities. The project leader is responsible for adopting the budget of the evaluation in the total project plan and the supervision of the implementation of the evaluation.

Ad 8. Dissemination

Dissemination is the spreading of information to persons, groups of persons or organisations to reach a certain impact. Important in dissemination is that the message and the messenger (the medium) suit the target group (Figure 5).

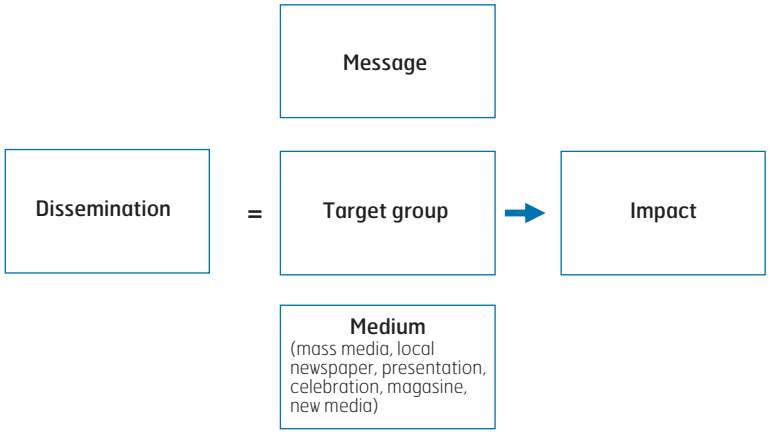

Figure 5: Dissemination

The expected impact of the message is the objective of the dissemination. The objectives of dissemination can be very diverse, think of: obtaining financing for (components of) the project, creating support among the members of the target group or their social network, increasing the number of stakeholders in a community, spreading knowledge, or increasing the reach of the activities for the target group (more examples of dissemination are shown in Table 3).

For dissemination of project data, it is not necessary to wait for the results of the outcome evaluation, this usually lasts too long. Also the results of the short-term evaluation and the process evaluation can be of great interest. Try to match the dissemination message to the evaluation questions of the target group as analysed in an earlier evaluation component.

Table 3: Examples of EPODE dissemination

Target group	Message	Medium	Impact
Members of the community	- Inform on the EPODE programme, the aims of EPODE - Direct people to the local EPODE website - Inform on the activity agenda	- Local newspaper (free publicity) - Newsletter - Leaflet - Poster	- Increase recognisability and social support - Increase reach of activities
Partners and community organisations	- Inform on the EPODE programme and the aims of EPODE - Stimulate participation - Share results of programme objectives: • number and reach of activities • number of established partnerships • inform on satisfaction of children and those directly involved in the EPODE methodology	- Meeting with presentations and workshops - Guided tour in the city - Celebration drinks - Newsletter by email	- Increase sustainability of the programme - Increase financial support - Cementing relationships and cooperation
Children and their families	- Inform on the EPODE programme and the aims of EPODE - Inform on local achievements - Inform on participating organisations and people - Stimulate participation in the organisation of activities - Stimulate active participation in new activities	- Newsletter - Website - Children's newspaper	- Increase programme support - Increase participation
Directors/ representatives	- Inform on achievement of targets: • number and reach of activities • number of cemented coalitions • budget • satisfaction of target group and local team - Inform on organisation of EPODE programme	- Presentation to the council	- Future budget - Increase collaboration with other governmental sectors

4.2. Advice to future organisations of EPODE programmes

Advice to national or central EPODE coordination:

- do not want to measure everything;
- create an "Evaluation and Monitoring" Roadmap; describe each step to be taken by central and local organisation;
- create an "Evaluation and Monitoring of EPODE" Evaluation Course;
- identify experts in community health promotion evaluation in each EPODE country;
- appoint an Evaluation Counsellor in the central coordination team;
- decide on the measurement of common indicators (give advice to communities on the measurement of, for instance, "engagement of stakeholders", should this be measured by the amount of money submitted, the number of meetings attended, or the number of activities organised);
- ask for statistics to support evaluation set-up and in analysing the data.

Advice to the local organisations in EPODE communities:

- do not want to measure everything;
- follow-up on the EPODE Evaluation Roadmap;
- continuous deliberation with EPODE coordination team and other EPODE cities on indicators and measurement of indicators;
- ask for statistics to support evaluation set-up and in analysing the data;
- establish a local evaluation group responsible for the evaluation of the programme; key-stakeholders should be involved in this group to secure sustainability.

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Part 3

Forthcoming perspectives

Chapter 8

EPODE and similar initiatives across Europe

Under the coordination of Julie Mayer and Léa Walter

Eight years have passed since the launch of the EPODE methodology in 2003 and it now extends to 226 towns in France. Since then, EPODE has been further disseminated in various European countries, in Spain, Belgium and Greece and more recently in The Netherlands and Romania.

Beyond the European borders, the South Australia region and Mexico also have developed community-based interventions using the EPODE methodology.

This chapter gathers eleven interviews and data from EPODE programmes, EPODE-similar initiatives and other teams that wish to develop such programmes in the future.

Mireille Roillet,
Project Manager of the
VIASANO programme

When Mireille Roillet went from traditional health communication to managing an obesity prevention programme three years ago, the required skills were about the same: health communication, from marketing to social marketing and networking with various stakeholders. With VIASANO, she discovered the opportunity to meet and interact with the population and local institutions.

What are the characteristics of VIASANO, compared with the other EPODE programmes?

First of all, as Belgium is a multicultural country, we have to adapt our methodology and our communication to each of the cultural communities. When meeting with the local authorities, we have to know the way they are structured in the Flemish, French and German-speaking communities. It also means that you have to adapt the communication to regional nutritional recommendations. Including human resources from these regions, the central coordination team and expert committee are adapted to these specificities.

The type of partnerships varies from one EPODE programme to another. The VIASANO programme works with various formal public partners, from communities to scientific associations, societies and leagues and with three private partners. This combination of partnerships fosters long-term achievements and recognition among the experts.

What are your resources for continuously improving your programme?

Durability and continuous improvements are of major concern when the programme has been running for a few years. We are trying to propose bi-annual campaigns for the general public that integrate the latest scientific knowledge in obesity prevention. For example, we know from the expert committee that a link has been found between sleeping conditions, diet and physical activity, so we developed a VIASANO campaign on nutrition, sleep and health.

Moreover, we have the chance of belonging to a European coordination network. It allows us to exchange information and experience with the other central teams and receive advice about social marketing strategies. We are eager to learn from the EPODE European Network results, notably for improving our evaluation methodology.

In the field, from local feedback and scientific knowledge, we are increasingly adapting the programme to specific populations, particularly to deprived families, who are at greater risk of developing obesity.

What advice would you give to the people who wish to develop a similar programme?

VIASANO is not a top-down programme. The local teams build up their own personality and I am convinced this is the way we can achieve our goal. So I would recommend carefully listening to local stakeholders to adapt the action plan. At a central level, building a talented and motivated scientific committee will carry the programme to success and recognition. The central coordination needs to gather multiple competences, such as communication, social marketing, public health and networking skills. Overall, getting advice from an international network is also very useful for getting moral support and helps to develop a programme.

Official starting date of VIASANO programme: January 2007

Number of entities involved from 2008 to 2010: 7 towns in the Flemish and French regions, and 9 towns in the German-speaking region.

Number of inhabitants involved in 2010: 330 000

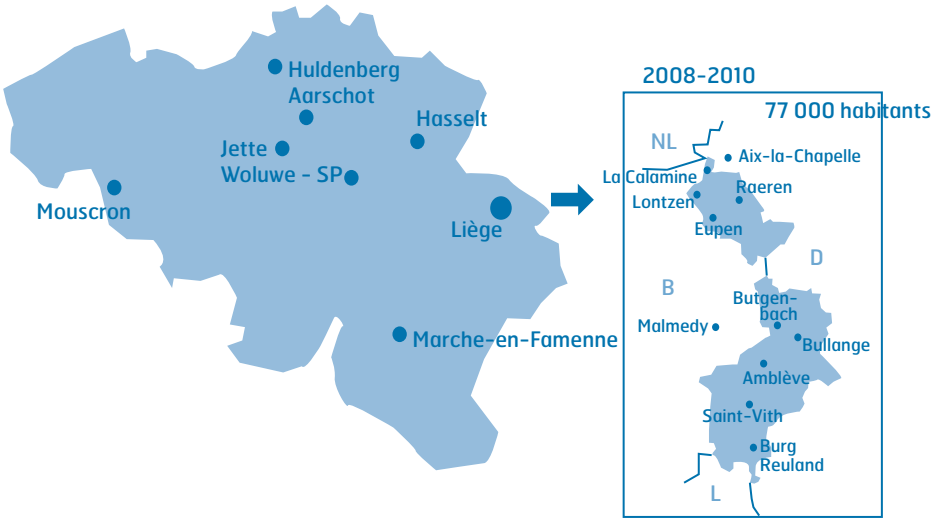

Figure 1: Dissemination map of VIASANO programme (2008-2010)

Type of partnerships	**Public-private partnership** **Institutional partners:** Flemish community **Scientific partners:** Belgian Association for the Study of Obesity, Belgium paediatric society, Flemish and French Belgian Professional unions of dieticians, Cardiology Belgian league, Flemish and French Belgian associations for diabetes, Belgian society of nutritionists **Financial partners:** Ferrero (since 2006), Unilever Health Institute Belgium (since 2006) and Orangina-Schweppes Belgium (since 2008)
Scientific expertise	Cardiology, pharmacy, nutrition, psychology, public health, physical activity, pedagogy, paediatrics
Type of actions implemented	**Child level:** activities, information and communication targeting children and families **Community level:** training sessions for local project managers and support from the local stakeholders to implement actions **National level:** advocacy, public-private partnership management, training and coaching of local participants, development of communication tools, media communication, website administration, annual congress organisation
Type of involvement of political stakeholder	Renewable commitment of the local authorities for 4 years
Main results to date	First body mass index measurement among children from 4 to 12 years old from the two pilot towns Mouscron, Hasselt and from the German-speaking community in 2008

Programme references:

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Rafael Casas,
National Coordinator
of the THAO programme

Thao
salud infantil

Rafael Casas is a medical doctor specialising in Psychiatry and Psychosomatics with a psychological background. He has a thirty years experience of qualitative research in the healthcare area, especially in food and physical activity habits. In 2005, he was involved in the implementation of the EPODE methodology in Spain, which was officially launched in 2007 with 5 pilot towns.

How did the THAO Programme begin?

When we first thought about a possible implementation of the THAO Programme in Spain, there was almost no awareness about obesity as a huge public health issue; it was only considered an esthetic matter. In 2005, the healthcare and public health professional networks began to alarm the population about the increase in the prevalence of childhood obesity. The International Obesity Task Force (IOTF) confirmed this trend for Southern European Countries, which had the highest rate of overweight children. From these alarming data, the Ministries for Health, Sport and Education together with the corporate sector and the scientific experts developed a national strategy called "NAOS". The THAO Programme, with the government support of NAOS and based on the EPODE methodology, came as a model allowing the integration of national coordination in a local leadership to promote healthier lifestyles and prevent childhood obesity.

What are the characteristics of THAO, compared to the other EPODE programmes?

As the programme was disseminated, we had to adapt the EPODE methodology to the Spanish and Mediterranean context. Since the beginning, we chose to adopt an emotion-based approach using fun and cultural communication to engage the children and their families so the actions would meet the population's expectations of our campaigns. As regards the evaluation of the impacts, to date we are trying to go further with BMI measurements, assessing the waist circumference, and monitoring food consumed and physical activity habits. To reach this ambitious objective we are working for the unification of the Thao evaluation protocol, made by the Thao Evaluation Committee, composed by experts and members from 3 Spanish universities.

What achievements are you proud of and what are your expectations for the future?

We are proud of the notoriety of the Programme among the scientific community, the institutions and the political representatives. In this respect last year we received the prize for Health Culture 2010 from the Association of Health Education. Another important signal is the continuous growth in the number of THAO cities, which has gone from 5 to 98 towns in 5 years. We are also planning to strengthen collaborations with Switzerland, Italy, Portugal and South America (Colombia, Bogotá). Beside that, we are working on the development of new technologies and the use of social networks to serve the Programme's objectives. We are designing three tools: an online resource centre gathering with "best in class" actions implemented locally, to be shared among the project managers, a web application to collect BMI and evaluation questionnaire data, and an interactive platform dedicated to children, to involve them in THAO activities. Our next challenge is to develop a specific obesity prevention programme (THAO-first childhood) dedicated to the children aged 0-3 years.

What advice would you give to people who wish to develop a similar programme?

My first advice would be to have the determination to recruit new towns. It is important to establish a strong relationship based on trust through repeated visits and meetings. In-depth knowledge of the territory is essential to reach the local people. Further advice is to increase knowledge of the field to ensure that the Programme is well implemented in the long run. Finally, a fundamental aspect is to ensure that you have sufficient funding to be able to roll out the Programme. To date the THAO Programme has received private and public funding. Recently, we received a funding from the Sports Council to publish a physical activity guide for sports teachers aimed at promoting sport and physical activity in the THAO towns.

Official starting date of THAO programme: January 2007

Number of entities involved from 2007 to 2010: 98 towns

Number of inhabitants involved in 2010: about 2 500 000, including about 300 000 children

ANLALUCÍA. **Sevilla**: San Juan de Aznalfarache, Las Cabezas de San Juan, Sevilla. **Cádiz**: Jerez de la Frontera, La Línea de la Conceptión, Chiclana de la Frontera, Barbate, San Roque-Sotogrande, Sanlúcar de Barrameda. **ARRAGÓN**. **Terruel**: Utrillas. **Zaragoza**: Caspe. **Huesca**: Monzón. **ASTURIAS**. **Asturias**: Gijón, Valdés. **CASTILLA LA MANCHA**. **Ciudad Real**: Alcázar de San Juan. **CASTILLA Y LEÓN**. **Valladolid**: Valladolid. **Palencia**: Palencia. **CATALUÑA**. **Barcelona**: Castelldefels, Martorell, Badalona, Montgat, Montcada i Reixac. **Lérida**: Pont de Suert, Organyà, Coll de Nargó, Figols, Alinyá, Ribera d'Urgellet, La Seu d'Urgell, Peramola, Montferrer i Castellbo, Castellciutat, Alàs i Cerc, Maials, Liardecans, Sarroca de Lleida, Alcanó, Alfés, Sunyer, Aspa, Juncosa, El Soleràs, Els Torms, Castelldans, L'Abagès, El Cogul, Balaguer, Montgal, Butsènit, Penelles, Vilanova de Meià, Bellmunt d'Urgell, La Sentiu de Sió, Cubells, Preixens, Pradell, Les Ventoses, Tremp, Isona, La Torre de Cabdella, Alins, Llavorsí, Rialp, Trivia, Ribera de Cardós, Esterr d'Aneu, Sort, Barbens, Cervera, Solsona, Puigverd d'Agramunt, Montclar d'Urgell, Castellserà, Agramunt, Verdú, Guimerà, Ciutadilla, Vilagrassa, Tomabous, Sant Marti de Riucorb, Belianes, Maldà, Els Omells de Na Gaia, Preixana, Vielha. **Tarragona**: Tortosa, Santa Bàrbara, Sant Carles de la Ràpita. **GALICIA**. **La Coruña**: Ames, Santiago de Compostela. **ISLAS BALEARES**. **Mallorca**: Inca. **Menorca**: Alaior. Ibiza. **MADRID**. **Madrid**: Aranjuez, Villanueva de la Cañada, Pozuelo sz Alarcón, Alcobendas.

Figure 2: Dissemination map of THAO programme (2007-2011)

Type of partnerships	**Public-private partnership** **Institutional partners:** AESAN (Health Ministry), Sports Council (Sports Ministry), Autonomous Governments Scientific partners: Spanish Nutrition Foundation (FEN), Spanish Universities **Financial partners:** Ferrero (since 2007), Nestlé (since 2007), DKV (since 2008) and Orangina-Schweppes Belgium (since 2009)
Scientific expertise	Cardiology, pharmacy, nutrition, psychology, public health
Type of actions implemented	**Child level:** activities, information and communication targeting children and families **Community level:** training sessions for local project managers and support from the local stakeholders to implement actions **National level:** advocacy, public-private partnership management, training and coaching of local participants, development of communication tools, media communication, website administration, annual congress organisation
Type of involvement of political stakeholder	Renewable commitment of the local authorities for 4 years
Main results to date	Analysis of the waist circumference of more than 20 000 children in 2009-2010

Programme references:

www.thaoweb.com

JM Borys, S Raffin, R Casas. Lecture "Roll out of a successful model for obesity prevention in children – The EPODE initiative (Ensemble Prévenons l'Obésité des Enfants) in France and THAO Program in Spain". NUTRITION Congress 2006, Barcelona, September 2006.

Lecture "Prevention of the childhood obesity based on actions in the towns in Spain". 2nd Congrès National des Villes EPODE, Roubaix, 29th and 30th March 2007.

Poster Communication: Estévez Santiago R, Martínez Galedano L, Casas Esteve R, Beltrán de Miguel B, Ávila Torres JM, Varela Moreiras G. Relationship between waist circumference risk prevalence and children's overweight and obesity prevalences among Spanish towns in Thao-Salud Infantil Programme. *Public Health Nutrition* 2010; 13: 189.

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Helena Stamou,
National Manager
of the PAIDEIATROFI programme

ΠΡΟΓΡΑΜΜΑ ΠΡΟΛΗΨΗΣ ΠΑΙΔΙΚΗΣ ΠΑΧΥΣΑΡΚΙΑΣ
παιδειατροφή
by EPODE

PAIDEIATROFI means "child", "education" ("PAIDI" and "PAIDEIA") and "nutrition", "food" ("DIATROFI" and "TROFI"). Based on the EPODE methodology, this programme is aimed at promoting the adoption of healthier lifestyles by families and children, contributing to preventing childhood obesity in Greek communities. Helena Stamou explains how she managed to develop the first health prevention programme to be implemented at both central and local levels in Greece.

What were the main barriers to overcome when you started developing the programme?

Mobilising sustainable resources was the most difficult task; this is why building a public-private partnership (PPP) framework appeared to be the right solution. Nonetheless, finding private partners was difficult because they were not very used to supporting programmes as part of their corporate social responsibility (the EPODE PPP framework), rather than implementing product-related marketing strategies with short-term results. We did step-by-step work to convince them of the benefits they could find in following us in the long run.

At a local level, it was a shock for the local project managers! We proposed they contribute to a project but not get an additional pay raise. However, it finally worked out when they realised the direct impact of their work on the public's behaviour, especially the children's happiness. Now they are very motivated and they told us that they

feel much more fulfilled as individuals contributing to their local society. From 5 pilot towns in 2005, the programme now involves 14 towns.

Is a programme not emanating from the Greek government an advantage?

At a central level, the programme is implemented by the national coordination team from NOSTUS Communications & Events agency. The Ministries have changed so much in the past two or three years that it would have been more difficult to be consistent if we were coordinated at governmental level. With PAIDEIATROFI, we show consistency as regards to coaching, support and tool development at all levels. Since 2008, a four-year national plan for nutrition and nutritional disorders has been in place, but with only few actions at national level. This is obviously useful and necessary, but we propose something more; we work directly at local level, with "real" people. So I would say that this is an advantage. Moreover, the programme is endorsed by various ministries and we continuously keep them informed of the programme's achievements.

What are the strengths of your programme and how would you like it to continue in the future?

We believe in continuous improvement, getting comments and feedback from the towns, the mayors, and the scientific committee to improve implementation of the programme. For example, we have only used a few of the tools that exist in the EPODE methodology. We believe that we should design and use new tools, like specific calls for proposal aimed at funding local projects, and we can better adapt the tools we develop (see the table) to specific populations.

As for the evaluation side, we would like to involve universities to help us in implementing an evaluation framework so we can better monitor and show our results to the actual and future stakeholders of PAIDEIATROFI.

Official starting date of PAIDEIATROFI programme: 2008

Number of entities involved: 14 towns.

Number of inhabitants involved: 1 000 000

Figure 3: Dissemination map of PAIDEIATROFI programme

Type of partnerships	**Public-private partnership** **Governmental partners:** Ministry of Health and Social Solidarity, General Secretariat for Consumer Protection, Ministry of Education and Religious Affairs, General Secretariat for Youth, Intermunicipality Health & Welfare Network **Scientific supporters:** Hellenic College of Pediatricians, Hellenic Child and Adolescent Endocrinology Society, Pan-Hellenic Association of Dieticians and Nutritionists, Pan-Hellenic Association of Dieticians and Nutrition Technology Specialists, Hellenic Foundation of Gastroenterology and Nutrition, Hellenic Endocrine Society, Hellenic Medical Association for Obesity, Foundation Aristides Daskalopoulos, Medical Association for the Study of Risks Factors for Cardiovascular Diseases **Private partners:** International Foundation Carrefour, Group Carrefour-Marinopoulos Hellas S.A., Ferrero Hellas, Nestlé Hellas
Scientific expertise	Paediatric, child psychiatry, nutrition, physical activity and food technology experts
Type of actions implemented	**At central level:** mobilising institutions, experts, scientific groups, private partners and local key opinion leaders in municipalities Continuous training and coaching of local project managers Monitoring and evaluation of the programme Developing specific tools: posters, leaflets (general population), pedagogical kits (teachers), informative letters (health professionals), roadmaps and best practice documents (local project managers) to support the implementation of social marketing campaigns at local level **At local level:** informative talks with parents, breakfast festival, painting exhibition on food habits, physical activity events... The actions involve, for example, schools, nurseries and medical centres
Type of involvement of political stakeholder	The town Mayor has agreed on a 4-year political commitment, to be renewed after 2012. He has composed a local team, in charge of the local coordination: a Project Manager (permanent employee of the municipality), a Nutritionist/Dietician and a Doctor
Main results to date	This is the first time in Greece that a health prevention programme has been sustainably implemented at local level Overweight prevalence in PAIDEIATROFI towns has been measured once (overall sample of 2821 children) and the repeat measurements are scheduled for 2012

Programme references:

www.paideiatrofi.org/

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Paul Rosenmöller,
Chairman of the Covenant on Healthy Weight and ambassador of the JOGG programme

JOGG
Jongeren Op Gezond Gewicht

As a former active member of the Dutch parliament, Paul Rosenmöller had the perfect background to mobilise forces for the cause of childhood obesity prevention. Appointed as the chair of the Covenant on Overweight and Obesity[1] by the Minister of Health in 2005, he now develops a programme called JOGG (meaning "Young People at a Healthy Weight"), based on the EPODE methodology.

Could you tell us about the start of the JOGG programme and its objectives?

At the end of the first covenant (end of 2009) an impressive list of the actions that had been carried out by all partners to tackle overweight was compiled. However, the overweight prevalence was stabilising in some but not all age groups. The federal government and the former partners in the covenant therefore decided that overweight prevention needed a strengthened and coordinated approach that led to the Covenant on Healthy Weight. It was decided that special attention should be given to children. After a visit to Paris to meet with the EPODE team (based in Protéines®), the partners of the Covenant became enthusiastic about the French EPODE methodology. Key elements of this approach were translated to form the Dutch JOGG-programme.

JOGG focuses on a local branch-integrated approach using proven interventions in the area of food and physical activity, which are linked to national themes. The

1. Covenant on Healthy Weight 2010-2015: this covenant unites 27 participating organisations ranging from the Ministry of Health, local and federal government, federations of organised private companies and non-governmental organisations in their efforts to stop the increasing rates of overweight and obesity in the Netherlands.

programme is especially designed for reversing the increasing trend in overweight in children and adolescents. It was launched in 2010. In 2015 at least 75 municipalities should have adopted the JOGG approach to promote a healthy weight among young people.

What are the specificities of JOGG compared to other obesity prevention programmes?

The JOGG approach is based on five pillars: political-governmental support, public-private partnerships, social marketing, scientific research and linking prevention and healthcare. So one of its specificities is the political-governmental and private support we get. The nature of the interventions employed is another particularity, as for us they should be science based. On this point, additional research will follow the interventions to create a knowledge base of effective tools and methods. Finally, we insist on the importance of linking prevention and healthcare, to develop a centralised approach to prevention and care that will ensure that parents, children and adolescents get the right help at the right place when dealing with overweight.

What achievements are you proud of and what will the next steps be?

As chairman of the Covenant on Healthy Weight and ambassador of the JOGG programme, I am proud to be part of an initiative working towards a solution with many relevant parties, such as the government, privately held companies and non-governmental organisations (NGOs). The first JOGG year has focused on building commitment. Because we had a small core team we could make rapid decisions. At central level, having the support of important key stakeholders (e.g. national government and national institutes) and a clear vision (a strong story and background) helped enormously to gain the involvement of existing overweight prevention initiatives.

This process has already proven to be successful, with 6 municipalities and one province joining the JOGG approach, with 6 private partners in place at national level, and with the creation of consolidated support from stakeholders in public health science, national politics and local government and health promotion. We also had the chance to have the support of Princess Máxima for the launch of JOGG in the province of Drenthe, which will probably help in opening doors at a higher level.

Because many local programmes will have kicked off in 2011, JOGG will have to demonstrate measurable behaviour modifications and a decreasing trend in overweight in the coming years.

Official starting date of JOGG programme: 2010

Number of entities involved: 6 municipalities and the province of Drenthe

Number of inhabitants involved in 2011: about 1 000 000

Figure 4: Dissemination map of JOGG programme

Type of partnerships

Coordinating partner:

Central Coordination hosted by the Covenant on Healthy Weight

Main sponsors:

Federal Government: Ministry of Health, Welfare & Sports

Health promotion partners:

Voedingscentrum Nederland (Netherlands Nutrition centre), NIGZ, NISB (National Institute for Sports and Movement), Nederlandse Hartstichting (Dutch Heart Foundation), RIVM, CGL/Loket gezond leven, GGD, Consortium CIAO, Gezonde slagkracht, PON

Science & education partners:

Free University of Amsterdam, Hogeschool Windesheim, ZonMw

Private partners:

Albert Heijn (retail company), Albron (food caterer), Unilever (food, home and personal care), Nutricia (food), FrieslandCampina (dairy food), Zilveren Kruis Achmea (assurance company)

Some examples of local partners:

Utrecht: Albert Heijn, Albron, Douwe Egberts and Agis have committed to attributing knowledge, experience and financial means to the JOGG local coordination team

Veghel: private parties such as Mars, jumbo, Maison vd Boer

Rotterdam: Unilever, Nutricia, Zilveren Kruis Achmea

Scientific expertise

Professor of nutrition and health, expert in lifestyle change in adolescents, Chairman Covenant on Healthy Weight Steering Committee and JOGG ambassador, local municipal representatives, local stakeholders

Type of actions implemented

Full political and governmental support for prevention programmes promoting healthy weight in an increasing number of Dutch towns

Intersectoral programmes in schools, such as: "JUMP-In", "Lekker Fit!"

Public-private partnerships with local companies

Co-operation with local spatial planning departments

Professional sport education in schools

Increasing JOGG-town's bicycle lane coverage

JOGG-Veghel: National Sport week

JOGG-Rotterdam: water campaign and social marketing to encourage effective parenting styles

JOGG-Utrecht: Fruit promotion policy at many schools

JOGG-Utrecht and JOGG-Rotterdam: easy kitchen gardens (vegetable and fruit) for children (2-4 yr) in day-care centres (in cooperation with Nutricia)

Type of involvement of political stakeholder

Renewable commitment of the local authorities for 3 years

Main results to date

6 municipalities and one province have joined the JOGG approach

6 private partners are in place on a national level

Consolidated support from stakeholders in public health science, national politics and local government and health promotion

Programme references:

General brochure

www.jongerenopgezondgewicht.nl/download/3/jogg_brochure_online_los.pdf

General website

www.jongerenopgezondgewicht.nl/home

The Covenant on Healthy Weight - website

www.convenantgezondgewicht.nl/convenant_gezond_gewicht

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Silvia Bucur,
Project Manager of the "I'm living healthy, too!" movement

ȘI EU TRĂIESC SĂNĂTOS!
www.sets.ro

Silvia Bucur created the first Romanian programme for nutritional education in 1999. "The World of nutrition" was developed with the support of two Ministries, funded by private partners and involved more than 27 towns, 150 000 pupils, 400 000 family members, and over 1 000 000 people. To pursue this dynamics, this year Silvia Bucur is launching the "I'm living healthy, too!" movement.

Could you describe in which context the "I'm living healthy, too!" programme was designed?

In April 2009, the Romanian Institute of Public Nutrition published a study showing that the prevalence of childhood obesity had doubled in the past 8 years and that type 2 Diabetes had dramatically increased. It was the starting point of awareness among public opinion as well as debates between several stakeholders, such as the Health and Education Ministries interested in developing a childhood obesity prevention programme in Romania with a holistic approach. Thus, one of our main objectives with the launch of "I'm living healthy, too!" is to foster a national debate on healthy lifestyles, with the institutions' organisation, to address the question and the relationship between public and private sectors involved in health-related issues. The idea was also to build on the successful "World of nutrition" programme that we had created in 1999.

What are the main characteristics of the set up of your programme?

This programme is aimed at promoting healthier lifestyles for children from 8 to 11 years old in Romanian public schools. The Ministry of Education is our partner near the Ministry of Health, Olympic Committee and 3 major medical associations.

In practice, we launched the movement on the 1st of March 2011 via the first national press event with over 30 journalists attending, and followed by a workshop with the Scientific Council members meant to decide the road map of communication towards our targeted audiences in the following 9 months. It also includes an online platform dedicated to children and families and the presence of "I'm living healthy, too!" in social networks. Two weeks later, 50 000 educational materials were delivered in over 180 schools in Bucharest together with letters to the parents. Training courses with coordinating teachers also took place during this period. Afterwards we launched the "family day", a public event consisting of physical activities and organised together with the Town Hall. Finally, from 1st of April to 15th of June 2011, ten open lessons were organised in schools, with major key opinion leaders and over 100 000 pupils and parents.

What are your resources for ensuring the sustainability of your programme?

This is an important topic! In fact one of our main concerns is the programme's funding. Romania is experiencing the effects of the economic crisis, as are other EU countries. We looked for private companies' financial support and now Romalimenta, the Romanian Association of Food Industry via 6 major members - Nestlé, Mars, Kraft Foods, PepsiAmericas, Coca-Cola, Unilever as well as Carrefour - are our partners. For example, Carrefour will allow us to promote the programme in its supermarkets and in its internal radio and TV station. We also have the support of the "World Class" Fitness Club, which is offering free entrance to the winners of the annual contest we are planning to organise.

Have you already planned an evaluation framework for your programme?

Yes, we held several consultations with nutrition and sociology experts to design a feasible evaluation process. We will distribute evaluation sheets to the teachers coordinating the programme and to the targeted families. Afterwards, we are planning to assess people's mobilisation in the actions implemented, the amount of activities developed and their perception by the population. We are also discussing a partnership with a market study agency. It is clear that being part of the EPODE European Network will be very helpful for us, not only for the evaluation aspects, but also for sharing best practices. Finally, this European alliance will allow us to benefit from a greater communication and visibility at the European level, which will support our action to prevent juvenile obesity and promote healthier lifestyles.

Official starting date of "I'm living healthy, too!" programme: March 2011

Entities involved in the pilot phase: all schools in Bucharest, Romanian capital

Number of children involved in 2011: 50 000

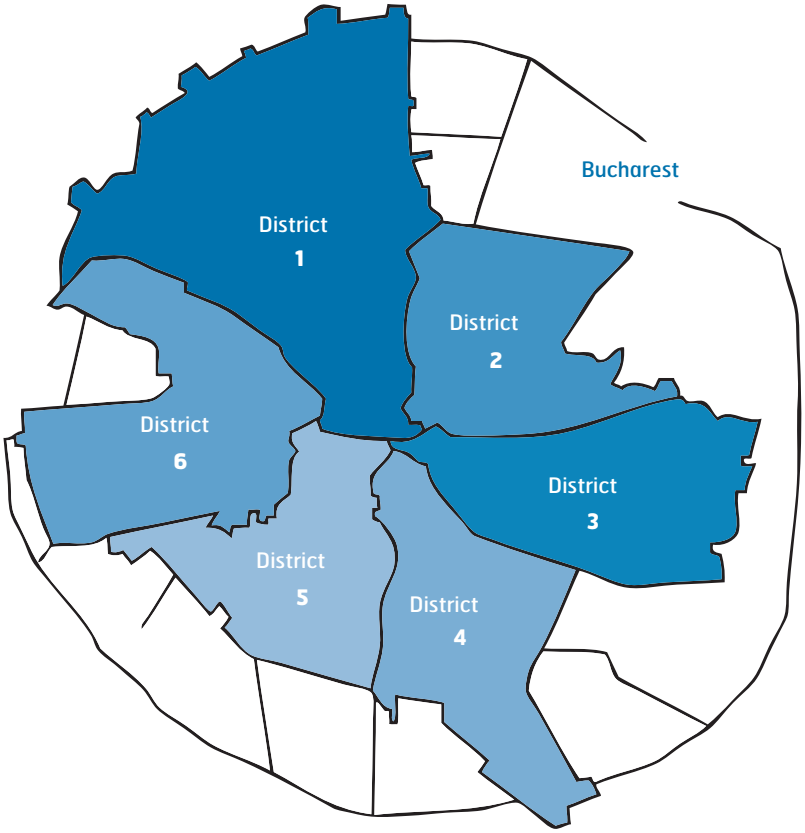

Figure 5: Dissemination map of "I'm living healthy, too!" programme (2011–2016)

Type of partnerships	**Public-private partnership** **Institutional partners:** Ministry of Education, Ministry of Health **Scientific partners:** Confederation of Diabetes and Nutrition Associations **Financial partners:** RomAlimenta, Carrefour **Other Partners:** World Class Fitness Club, Romanian Olympic Association
Scientific expertise	Nutritionists, sociologists, psychologists
Type of actions implemented	**Local level:** books in schools, open lessons, physical activities via sports and entertainment clubs, public information via the www.sets.ro portal and extensive media relations aimed at children and families **Community level:** training sessions of the coordinating teachers and assistance to the local stakeholders **National level:** development of informative tools, media communication, website, annual conferences
Type of involvement of political stakeholder	Renewable commitment of the local authorities for 5 years
Evaluation framework	Assessment of the involvement of the population and the stakeholders total mobilisation and measure of the perception of the activities developed

Programme references:

www.prais.ro/en/fundatia-prais.html

www.sets.ro

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Linda Owen,
Programme Manager of
the Dumfries and Galloway Council
Healthy Weight Community

Linda Owen was appointed at the beginning of 2010 to design and coordinate the Healthy Weight Community programme in Dumfries. Taking up this challenge, managing the project from the beginning, she had the opportunity to expand her skills in project management and in the development of strategies and policies.

How did you build up the programme in your community and what were the first steps?

In 2008, due to the alarming prevalence of obesity in Scotland (64% overweight, including obesity. Source: Scottish Health Survey, 2008), the Scottish Government developed the "Healthy eating, active living" (2008-2011) action plan. Part of this plan was the call for a proposal to implement "the Healthy Weight Communities Programme" locally. 8 communities were elected. Following this in 2010, the Government developed a route map to prevent obesity, which takes a holistic view. From only a few guidelines, we started to look at the EPODE model and at other similar programmes to evaluate what had been done and how to adapt it to our community. Therefore, together with 20 potential partners, such as leisure and sport services, schools and the health board, we determined which outcomes we could achieve. Of course, some actions already existed (active schools, programmes encouraging cycling & walking etc.) from which we also built up the programme. Following a preliminary action phase, we conducted research in the community, including 368 individuals, to evaluate the community's perception of their own healthiness and their willingness to adopt heal-

thier behaviours. Following on from this, we tested three brands, and we were very pleased that 70% reported positive feedback on our brand.

According to your knowledge and experience, what are the similarities and the differences between the Healthy Weight Communities and the other EPODE programmes?

The key role of the mayor, who, in Scotland, does not have the same authority and influence as in France, makes a major difference. Also, apart from the evaluation process provided by an independent company nominated at governmental level, the Healthy Weight Community Programme has no central coordination. Through the evaluation, some recommendations can be reported about the progress of the project. What we share with the EPODE methodology is the use of social marketing in both process (e.g. the training sessions) and techniques (e.g. the consistency of the messages, the tailoring). Finally, the "sharing best-practice" mindset is also very valuable for improving the programme. In this respect, every couple of months we meet the other local project managers and have a discussion on the main topics, such as the recruitment of partners or the new social marketing projects.

Could you please describe the main barriers that you encounter(ed) when starting and implementing the programme and the main keys to success?

So far, the main barrier has been the sustainability of the programme and the length of time taken to address the complex issues around healthy weight. Mainly because of the economic crisis, each Healthy Weight Community has to submit a funding proposal every year in order to extend the duration of the programme. It is likely that the Dumfries community will receive public support until March 2012. It is clear that having a public support is a key to success. For example, it allows access to schools, that became active partners of the programme and with which we could implement interesting and lasting initiatives such as "Active travel" and "Healthy Drama". Finally, a critical success factor in my opinion is the autonomy of the local coordination as regards to the decision-making and the partnership management.

Official starting date of "Healthy Weight Communities" programme: July 2009
Number of entities involved from 2010 to 2011: 8 communities
Number of inhabitants involved in 2010: 222 825
Number of inhabitants involved in the Dumfries community: 12 183, starting in February 2010

Figure 6: Dissemination map of "Healthy Weight Communities" programme (2010–2011)

Type of partnerships	**Public support:** The Scottish Government At local level, the project is being jointly led by Dumfries & Galloway Council and Dumfries & Galloway National Health Services Board
Type of actions implemented	**Local level:** activities, information and communication in the following segments: • young people at lunch time • parents who do not exercise • families who do not cook/rely on takeaways • families who are healthy and wish to stay healthy • portion size **Community level:** work in partnership across sectors in the planning and delivery of these joined-up programmes **National level:** evaluation study, best practice sharing amongst the Healthy Weight Communities
Type of involvement of political stakeholder	The programme has a "healthy weight champion". A local Councillor who was voted into the position by a formal committee of the council for the duration of the programme
Main results to date	70% gave positive feedback about the social marketing campaign developed (386 interviewees) BMI is measured when children start their primary education (at about 5 years old). These measurements will be compared at the end of the programme

Programme references:

www.dumgal.gov.uk/healthy

www.healthyweightcommunities.org.uk

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Jórlaug Heimisdottir,
Project Manager,
Public Health Institute

everything affects us especially ourselves

How is it that the programme "Everything affects us, especially ourselves!" covers 78% of the Icelandic population? How did this programme become a reference for the World Health Organization (WHO)? Jórlaug Heimisdottir, Project Manager of this programme, explains what she believes are the keys to success in childhood obesity prevention.

What is the general organisation of "Everything affects us, especially ourselves"?

The Public Health Institute (PHI) of Iceland runs the programme. In 2004-05, the PHI was very new and "Everything affects us, especially ourselves!" was the first programme to be launched. An important point is that our team has the possibility of mobilising other divisions of the PHI, such as the Research and the Public relation divisions and the nutrition and physical activity division, which allows critical synergies.

At a local level, the programme involves a wide range of stakeholders, from the municipality officials and administration (e.g. family, education and leisure department), to agencies and associations within the municipality (e.g. sports/leisure organisations and parents' associations), Primary Health care sector and School health care service. Stakeholders from different areas make up the local steering committees. From the start, we realised that listening to people at local level, in all sectors, would teach us a lot about how to work with them. Now that the programme is working well, I think it

is important to keep giving recognition by encouragement and feedback to all of the local stakeholders.

What are the goals and strategies of "Everything affects us, especially ourselves!"?

When starting such a programme, careful planning (using existing data to better understand the context) and focusing on a few objectives is important. Our goal from the start was to promote healthy lifestyles for children and their families by emphasising increased physical activity and improved diet. The project is based on a population-based, primary prevention strategy, to promote better facilities for public health improvement, in addition to making an effort to increase people's knowledge of the relevant, influencing factors. We distinguish the programme target from the implementation target. The programme targets and influences children, youths and their families who live in the participating municipalities. The target groups for implementation are politicians at a local level and municipal administration.

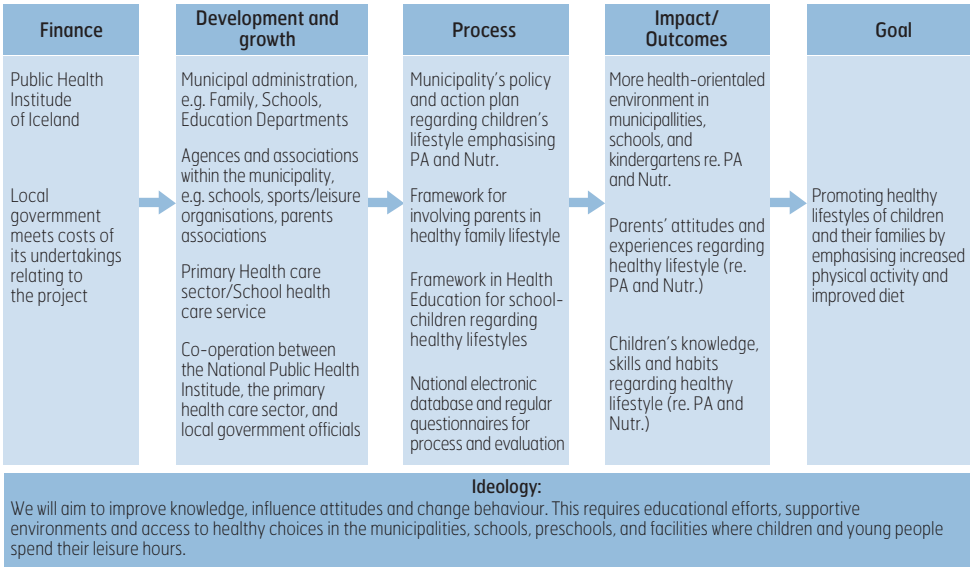


Figure 7: "Everyting affects us, especially ourselves!" strategy map

What do you think will the dynamics of your programme be in the future?

I am confident. Even with the economic depression in Iceland, we have managed to mobilise the local communities to put a long-term goal, such as childhood obesity prevention, on their agenda. "Everything affects us, especially ourselves!" is adaptable to the field, both top-down and bottom-up. The fact that the programme is continuously evaluated allows us to improve year after year. The project award we received from the World Health Organization, at the European Ministerial Conference on Counteracting Obesity in 2006, gives us the will to further develop the programme. That is why we are interested in the EPODE European Network. I am also convinced that the methodology we used could be applied to other Public Health issues such as smoking cessation, mental health, violence and alcohol abuse, other important matters in Iceland.

Official starting date of "Everything affects us, especially ourselves" programme: January 2005

Number of entities involved: 24 local governments/cities

Number of inhabitants involved in 2010: 249 000

Figure 8: Dissemination map of "Everything affects us, especially ourselves!" programme

Type of partnerships	**Public partnership** **At central level:** project run by the Public Health Institute (PHI) of Iceland, with a formal partnership with the Primary Health Care Clinic **At local level:** participation of the local government and administration, which has a formal partnership with school and pre-school staff
Type of actions implemented	• Analyse surveys for each municipality to assess the need for actions and to assess the outcome in each municipality • Give feedback to local authorities regarding the results of surveys • Adapted plans-of-action developed with municipalities • Checklists for assessing the local governments' and local stakeholders' needs and achievements in terms of policy, nutrition, democracy, local planning, environment and sports clubs • Courses and meetings with municipalities
Type of involvement of political stakeholder	• Local government takes responsibility for the project • Policy and action plan approving by the municipal authorities
Main results to date	• 91% of elementary schools follow PHI guidelines on nutrition for school-children, compared to 65% in 2005 • 90% of school nurses have received and use the educational material • More kindergartens offer fresh fruit every morning and vegetables daily with lunch • Proportion of kindergartens offering fish at least twice a week are 95% • 82% of kindergartens follow the PHI guidelines

Programme references:

www.lydheilsustod.is/utgafa/baekur-baeklingar-kennsluefni-skyrslur/allt-hefur-ahrif/

www.lydheilsustod.is/lydheilsustod/allt-hefur-ahrif-einkum-vid-sjalf/

www.6h.is/index.php

Contact : jorlaug@lydheilsustod.is

Ana Rito,
Principal Investigator of Project Obesity Zero

Projecto Obesidade *zero*

Ana Rito is a Researcher at the National Institute of Health Doutor Ricardo Jorge – Portugal, Vice President of Scientific Committee of the Platform Against Obesity (Ministry of Health) and Head of the Bachelors Degree in Nutritional Sciences at University Atlântica.

She is the Principal Investigator of Project Obesity Zero (POZ), which started in 5 municipalities in 2009. This project is based on the development of creative answers to tackle childhood obesity at municipality level.

Could you describe in which context the Project Obesity Zero was designed?

Project Obesity Zero has to be seen as one of the answers to the striking increase in the prevalence of childhood obesity in Portugal over the past years. In fact, according to the last WHO COSI Portugal study, 37.5% of Portuguese children are overweight or obese.

Since 2008, before POZ was designed, an important obesity prevention programme named MUNSI was implemented in Portugal involving 3 500 children and 5 municipalities. The MUNSI programme adopted a more general approach that is similar to the EPODE methodology.

The main purpose of POZ was first to survey the overweight and obesity prevalence in 5 other municipalities involved and located in the 5 Portuguese regions. The goal was then to target the families with overweight children (6-10 years old) through a set

of activities in order to reverse the trend. This project was the first in Portugal to put forward an approach to treat obesity in children with the involvement of community players such as schools and healthcare centres.

How is Project Obesity Zero implemented on the field?

POZ was developed in 2009 by the University Atlântica in partnership with the 5 municipalities (Melgaço, Cascais, Mealhada, Beja and Silves) with the financial support of the Directorate General of Health of the Ministry of Health.

The first step for the national team involved (5 people) was to contact the local governments and the Healthcare centres to collect all the data available and compare them with the data collected after the intervention. At this stage, we counted 482 overweight children (21.4%) out of 2 226 children measured. Then, we began setting up the interventions locally targeting families with the precious collaboration of the department of education and healthcare centres.

In order to have a homogeneous guidance of the project, the national team developed several training sessions for the local stakeholders with anthropometric measurements and nutritional counselling. In addition, each municipality had the help of a nutritionist who was responsible for coordinating the actions.

The interventions in the community lasted one year and were mainly healthy cooking workshops and nutritional and physical activity initiatives for children and families.

Moreover, we provided each municipality with two kind of tools: a "low budget and healthy" recipe book (most of families being from a low income background) and a food guideline diary for 7-year-old children.

What achievements are you proud of and what will the next steps be?

First, we are proud of the preliminary results of this quasi-experimental study, showing that 80.5% of the children involved decreased their BMI percentile after the interventions. We consider that it is a strenght to target the children one by one.

Another important objective was to foster the collaboration within the community, between the schools, the healthcare centres and the local government.

It is clear now that it would be interesting to combine a project like POZ, targeting the overweight children through an individual approach, with a wider programme like MUNSI, which addresses the whole population.

Official starting date of Project Obesity Zero programme: January 2009

Number of entities involved in the pilot phase: 5 municipalities in 5 regions

Number of children involved in 2009: 482

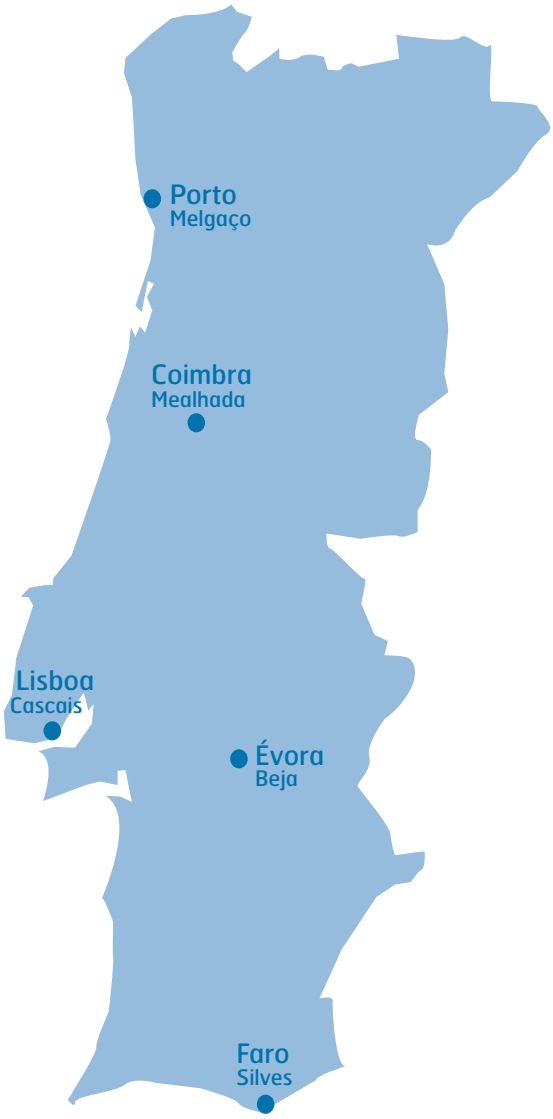


Figure 9: Dissemination map of POZ programme

Type of partnerships	**Public partnership** **Institutional partners:** Ministry of Health, Department of Education, Directorate General of Health **Scientific partners:** Atlântica University **Local partners:** Healthcare Centres, Local governments and Schools
Scientific expertise	Nutritionists
Type of actions implemented	**Local level:** • 1121 individuals received nutritional and physical activity counselling (Nutritional status assessment; Nutrition and Dietary Assessment; Diet, Nutrition and Physical Activity Education) • 20 Healthy Cooking workshops were held • 2 Children's Group Sessions (Nutritional and Physical Activity activities) where held • 5 Sessions of Parents/families Group counselling **National level:** development of informative and educational tools, Training sessions (anthropometric measurements, nutritional counselling)
Type of involvement of political stakeholder	1 year renewable commitment of the local authorities
Evaluation framework	Screening for childhood obesity and assessment of the evolution of the BMI percentile of the children involved in the project

Programme references:

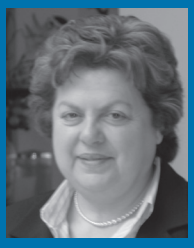
Ana Isabel Rito *et al. Childhood Obesity Surveillance Initiative:* COSI Portugal 2008. Instituto Nacional de Saúde Doutor Ricardo Jorge, Direcção-Geral da Saúde; Lisboa: INSA,IP, 2011.

Available online at: www.insa.pt.

Contact: ana.rito@insa.min-saude.pt

Childhood obesity prevention in Malta: national and local perspectives for the implementation of large-scale and sustainable Community-Based Interventions based on the EPODE Methodology

Marianne Massa,
Principal Health Promotion Officer,
Health Promotion and Disease
Prevention Directorate, Malta



Marianne Massa has 20-years of experience leading Health Promotion initiatives in the school setting. As a Member States Focal Point for Youth & Health representing Malta, Ms Massa carries out research into Young People's Health and is the Principal Investigator for the "Health Behaviour of School-Aged Children" Study in Malta.

Can you tell us about your role and activities, as Health Promoter, involving children and families?

First, the Maltese government develops many initiatives in the school setting with a particular attention to the multiculturalism present in Malta (42 nationalities among children). In 2008, *the Policy for Healthy Eating* was launched in the schools, to encourage the schools' food shops to provide healthy choices for children. Since January 2010, the schools have organised "healthy weeks" with the objective of raising awareness among children and their families. We also try to integrate courses on healthy living in the regular school curriculum. Moreover, since 2010, Malta has taken part to the European Union *School Fruit Scheme*[1] project, initiated by DG Agriculture and aiming to provide children with fruit through the Maltese schools.

1. http://ec.europa.eu/agriculture/markets/fruitveg/sfs/index_en.htm

In a broader view, and targeting all members of the public, we are joining the *Healthy Cities* network, initiated by the WHO European Office, encouraging the participation of the Maltese communities in the important process of thoughtfulness towards our living environment. Finally, the Health Department is engaged in initiatives related to health in the workplace and is rolling out consultation and evaluation processes, mainly assessing the will to change before starting an intervention, and comparing it with observable behaviour change afterwards.

How is the collaboration between the Central government and Local Councils like Dingli (*see following interview*) working? What are the next steps?

The Department of Health Promotion and Disease Prevention has made a commitment to support and offer its expertise in helping the local councils to attain health promotion goals. However, the onus of responsibility lies with the Council in bringing about the necessary changes for health. The Health Behaviour of School-aged Children Study showed that obesity rates for 11, 13 and 15 year-old children and adolescents in Malta are amongst the highest in Europe, reaching 34% of the population for these age-groups. It was therefore evident that obesity in young people had to be addressed as a national priority and various initiatives were planned with relevant stakeholders, including local councils. All the 68 Local Councils support the Central Government in maintaining a healthy environment for the Maltese population. Dingli Local Council was at the forefront, collaborating with the Health Promotion Unit to build a partnership to meet this aim.

Last year, the Council of Dingli introduced a perfect example of good practice when it ran a weight management programme. Dingli is a rural area, offering an unspoilt natural environment with the availability of an abundance of fresh products, and immense possibilities for walking. The rural background of the community should be safeguarded even with the current extent of the population.

Why are you interested in the EPODE methodology and do you think it could be adapted in your country?

I think the EPODE methodology is appropriate to work with children. I realised at the French EPODE conference last year (2010) that the programme had reached conclusive results in terms of behaviour changes and childhood obesity prevalence.

It would be interesting to implement such a programme in our country, but we have to face several barriers. The first one is the financial aspect, as the total budget for health promotion has been reduced. Also we, as a public health department, are not yet

prepared to enter a multi-partnership with the private sector, even if I am convinced that this kind of partnership can be positive.

The EPODE network could help us in building a coordinated dynamics at local level to implement initiatives outside the schools involving the whole community, so I am eager to join the network and pleased to see that some Maltese mayors are also very motivated.

Contact: maryanne.massa@gov.mt

Ian Borg,
Mayor of Dingli and member of the Maltese Local Councils' Association, Malta

A graduate in law, Ian BORG was elected as mayor in March 2005. It is his second legislation to date in Dingli, a town of 4 000 inhabitants. He is also an elected representative in the European Commission's Committee of The Regions.

How did the Local Council of Dingli begin its engagement in childhood obesity prevention?

In 2010, the government launched a national campaign on health promotion with a focus on nutrition and physical activity, which was not put in place locally. Therefore the Local Councils' Association in collaboration with the Health Promotion Office drafted a strategic action plan involving the local communities, aimed at adjusting their efforts in harmony with the National Plan.

Local research shows that Maltese children are not very physically active so we plan to increase physical activity opportunities both at school and in the community. To date we have been giving our inhabitants the chance to practice sports such as yoga,

pilates and aerobics free of charge. The introduction of structured guided walks within the locality has been sustained over a considerable timeframe and I am confident that it will continue.

We also coordinate activities with the local farmers to raise awareness among children about the food chain, the processes and benefits of eating fresh fruits and vegetables.

Furthermore, the Council, with the support of the central government, has engaged professionals in delivering talks and other awareness-raising initiatives on health within the community.

What are the main challenges you are facing in your Council in preventing childhood obesity?

Our main challenge is to introduce a new culture and mindset in the Maltese population. Maltese society is very conservative and reluctant to change and tackling everyday habits is even more difficult.

Concerning the roll out of activities, the main barrier we encounter concerns the lack of coordination at local and central level and the weakness of the evaluation processes.

To date, the councils are not officially responsible for their citizens' health. Thus, as the Local Councils' Association is the closest legislative body to the population, I would recommend its tighter collaboration with the Government. Another aspect concerns the fact that, as a council, we need help from other stakeholders, such as the private sector, which we still consider to be too far from sharing our concerns.

What would the added value of the EPODE methodology be in the context you have described?

The expertise based on a success story such as EPODE in Europe and worldwide could be of great help since the methodology has been proven to be beneficial in the countries where it has been implemented. Before this, we should deeply analyse the Maltese scenario, but I am convinced that the EPODE methodology can be the tool to allow us to implement a childhood obesity prevention programme at a local level.

Contact: borg_ian@hotmail.com

SOUTH AUSTRALIA

Mark Williams,
Opal Manager

In 2009, Mark Williams took up his post as the State Manager OPAL, which is a $40 million Australian Federal, State and Local Government-funded initiative based on the EPODE methodology. With a team of 45 staff based in 20 councils across South Australia and working from 2009 until 2017, OPAL is the most significant healthy weight initiative of its type in Australia. Mark Williams holds a Masters in Exercise Physiology and Bachelor of Education and has previously worked in the health, education and recreation sectors in South Australia.

How is the OPAL programme organised at central level and how has it been adapted from the EPODE methodology?

As with EPODE, the heart of the OPAL initiative is the OPAL communities with the focus on children and their families. Each community has an OPAL local team consisting of an OPAL Council Manager and OPAL Support Officer based in Local Government

to co-ordinate the programme at local level. Each local team has a local advisory committee to assist with the implementation of the programme within the community.

The OPAL local teams work with the OPAL State Co-ordination Unit (SCU) based in the Health Promotion Branch of South Australia (SA) Health. The SCU consists of the OPAL State Manager, Evaluation Manager and Social Marketing Manager plus support staff. Through SA Health, OPAL reports to the Minister for Health and communicates with the Cabinet.

OPAL receives advice from two Advisory Committees: the Scientific Advisory Committee (SAC) and the Strategic Advisory Committee (STAC). SAC is chaired by Professor Boyd Swinburn and has a membership of 18 academics representing all three South Australian tertiary institutions. Their role is to identify the themes and provide advice on the evaluation of OPAL. The STAC membership consists of representatives from a range of community sectors who advise OPAL on the implementation of themes at community level.

What is your evaluation plan and what are your results to date?

The OPAL programme logic was mapped based on a series of consultations with key stakeholders and through engagement with the SAC. The programme logic has been used as a guide for the OPAL evaluation to ensure that all components are included within the evaluation. As a result, there are several components to the OPAL evaluation. The primary evaluation takes a quasi experimental design where each community is matched to grouped comparison communities in a stepped wedge design. Those influential in children's lives will be surveyed to gain a holistic picture of children's eating and activity environments. For example children (9-11 and 14-16) and their parents (of 4-5 and 9-11 year olds) will be asked to complete surveys to ascertain their eating and activity behaviours, attitudes and knowledge. Parents will also be asked about the home environment. Principals of pre, primary and high schools will be asked about their environments and various stakeholders across communities will be surveyed. In addition, height, weight and waist measures will be collected and analysed from three cohorts of children: 4-5, 9-11 and 14-16 year olds. The primary analysis will be a repeat cross-section; however, where possible, longitudinal data will be matched and linked with other administrative data-sets.

What are the main things learnt so far from the OPAL implementation, and what are your perspectives?

OPAL has been operating for approximately two years. In that time, the main things that have been learnt though OPAL have been that:

- EPODE provides a **flexible approach** that has been able to respond to our local context;
- **highly capable staff** are critical to success and a team approach crucial to a well functioning programme;
- OPAL is a **State, Federal and Local Government partnership**, which is very powerful – providing significant financial, structural, policy, programmatic and marketing support;
- **political advocacy** and leadership at local, State and Federal level has been essential in establishing and expanding OPAL;
- with 20 Councils commencing OPAL programmes, **a consistent planning/ reporting framework** is vital – one that clearly states Aim, Goals, Strategies and integrates Themes. This allows the team to plan and communicate with one another effectively;
- **themes are engaging** at many levels – from politicians to academics through to families;
- conducting a **robust evaluation** is time consuming and expensive if it is to be done as well as we intend in South Australia;
- **advisory committees** are important for providing guidance and for advocating the programme;
- deciding on the **investment mix in a community is complex** and the use of evidence (including local experience) is important in decision making.

Official starting date of the OPAL programme: 2009

Number of entities involved: 16 Councils in 2011

Number of inhabitants involved in 2011: 363 107

Figure 10: Dissemination map of the OPAL programme

Type of partnerships	OPAL is a partnership between Federal, State and Local Governments. Formal agreements exist between: • the Federal Government and State Government of South Australia • the State Government and Local Councils (Local Government) The agreements reflect significant funding arrangements and are tied to outcomes (Health Weight, Healthy Eating and Physical Activity targets) OPAL staff gather skills in nutrition, dietetics, recreation and sport planning, exercise physiology, community development, social marketing, social work and evaluation At central level, OPAL is coordinated by the government of South Australia At local level (Councils) where OPAL is being implemented, local partnerships are also formed. These vary from site to site but are both Public and private partnerships
Scientific expertise	The OPAL Scientific Advisory Committee gathers expertise in nutrition, public health, childhood obesity prevention programmes, child physical activity, anthropometry, epidemiology, psychology of behaviour change, public health, public health nutrition, endocrinology, clinical nutrition, health economics, social marketing – consumer behaviour change, education, community development, evaluation of community-based obesity prevention programmes, psychology – body image sensitivities, Aboriginal health, ethics, knowledge management, paediatrics and education
Type of actions implemented	OPAL actions are driven by our themes and goals and fall under one of the following seven strategies: 1. Programmes and services 2. Research and evaluation 3. Coordination and partnerships 4. Policy, planning and legislation 5. Infrastructure and environments 6. Awareness – marketing 7. Education – training An example of action in a Council: During the theme, "Water. The original cool drink", a local recreation centre changed its policy on the pricing of bottled water. As a result, cheaper prices resulted in increased consumption of water and decreased consumption of sweet drinks
Type of involvement of political stakeholders	The State Government is funding OPAL from 2008 to 2018 The Federal government is funding OPAL through the National Partnership Agreement on Preventive Health from 2011 to 2015 Each of the 20 local Councils will fund OPAL in their region for five years. OPAL started in Councils in 2009 and will proceed until 2017 The success of OPAL will determine future investment in this model
Main results to date	OPAL has been established in 16 Councils across South Australia so far and one in the Northern Territory Scientific and Strategic Advisory Committees have been established Four themes have been developed and rolled out over two years Evaluation is to commence in 2011, which will provide information on physical measures, behaviours and psychosocial parameters

Programme references:

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Armando Barriguete,
National Coordinator of 5 PASOS

Dr. J. Armando Barriguete is the National Coordinator of the Mexican "5 PASOS" (5-STEPS For Your Health) programme. A specialist in psychiatry and psychotherapy, he is chief advisor on obesity, chronic diseases, and eating disorders to Dr Jose Angel Cordova, the Minister of Health in Mexico. Dr Barriguete was also appointed coordinator of the National Council for Prevention of Chronic Diseases (CONACRO) and of the ministerial summit of the Americas on obesity and non-communicable diseases, organised in Mexico in February 2011 with the PHAO/WHO support.

How was the 5 PASOS programme conceived and how has it been adapted from the EPODE methodology to become the local translation of the national Mexican public health plan to prevent obesity?

In 2007 Minister Cordova created a "task force on obesity and Non-Communicable Diseases (NCDs)" and appointed Vice Minister Hernandez and myself to lead this initiative. Specific strategies to control obesity and NCDs were included as part of the national agenda. This agenda involved implementing specialised units for medical care and mutual aid groups nationwide, creating long-distance certificate training programmes on chronic diseases and implementing an epidemiological surveillance system.

In order to reduce the prevalence of obesity in children (30%) and adults (60%), a programme geared towards individuals taking a hold of their life and health through

healthy habits and not directed at tackling disease was created. 5 PASOS ("steps") for your health is a science-based programme that is easy to understand, easy to implement, inexpensive and enjoyable. It includes 5 daily habits that Mexicans have stopped in the last 25 years: being active, drinking water, eating vegetables and fruits, measuring themselves and sharing. 5 PASOS works in 5 environments: family, school, work, parks/stadiums and municipality.

EPODE has provided a comprehensive methodology regarding the municipality in order to better understand how to associate and empower the Mayor and Governor in favor of Health as well as in providing useful social marketing techniques for a successful Community-Based Intervention (CBI).

What are the main barriers and levers in the dissemination and deployment of the 5 PASOS programme?

5 PASOS was created at the end of 2008 and was implemented from mid-2009. In spite of the economic hardships and after a meeting with EPODE, 5 PASOS started a national tour to share "how health can be conquered in 5 steps". The importance of seeing the programme as a voluntary model where change needs to come from the individual as well as from the community was the key in getting the states involved.

In this first stage, the programme was presented in schools, institutions, small clinics and to a broad range of audiences (e.g. women, teachers and parents).

Well-known national health institutes, ministries and some private industries were sceptic about 5 PASOS at first and saw it as a political movement, but over time and as a result of the positive impact it has had on the population, they are now highly active. Today, the experts and political figures from the states (Mexico is a federation) are the most active, creative and best promoters of 5 PASOS. The programme is most successful when it is decentralised.

A key aspect of the programme is the congruency of the leaders and promoters. The people who designed 5 PASOS have always applied these steps in their lives. The honesty embedded in the actions promoted, outlines the success of the programme in spite of the budgetary limitations.

What will the next steps be for 5 PASOS?

At the end of 2011 there will be at least 11 "5 PASOS" states and 6 ministries of the federal government involved. Our objective is to support them by providing training in communication and evaluation. We have had a webpage since 2009 (www.5pasos.mx) that includes information, network, best practices, links to

successful national and international programmes like EPODE, and a registration section to allow those parties involved to observe and evaluate their interventions. This system facilitates a database for further research. The next challenge is to get a large number of registrations in order to achieve a pool of quantitative and qualitative data for analysis and interpretation. As a recent development, a group of epidemiologists from the Ministry of Health was included into the federal 5 PASOS team.

In building towards regional and global positions from a health sector standpoint, Mexico has ascertained a leadership role in promoting inter-sectorial policies, strategies and actions. The programme has been disseminated in world summits (e.g. Mexican Summit for NCD in Obesity Prevention, Moscow Conference on Healthy Lifestyle, Aruba Pan American Conference on Obesity), and WHO asked the Mexican government to share 5 PASOS as a CBI best practice.

Official starting date of 5 PASOS programme: 2009

Number of entities involved: 27 out of 32 states are involved. Currently the 5 PASOS States (i.e. those that include "obesity and NCDs" in their state priorities) include Colima, the Federal District, Durango, the State of Mexico, Hidalgo, Morelos, Michoacán, Oaxaca, Puebla, Sinaloa, Sonora and Tamaulipas. The States of Baja California Norte, Veracruz and Yucatán are in the process of becoming "5 PASOS States". 40 Mexican consulates in the USA and 9 countries have asked for support in implementing the 5 PASOS programme (Cuba, Nicaragua, Costa Rica, Panamá, Colombia, Aruba, Santo Domingo, Morocco and Chile).

Number of inhabitants involved in 2010: more than 250 000 inhabitants

Figure 11: Dissemination map of initiatives related to the 5 PASOS programme in Mexico.
In dark blue, 5 PASOS States or States in the process of adopting 5 PASOS.

Type of partnerships

Central coordination: the Mexican Secretary of Health

Institutional partners: National Institute of Social Service, Family Integral Development, National Commission for the Protection of Social Health, Mexican Soccer Federation, National Institute of Public Health, Institute of Security and Social Services of the State Workers, French Embassy, Salvador Zubiran Nutrition Institute, State Governments, FIFA, CENSIDA, National Institute of Women, General Hospitals of Mexico, National Institutes of Health of Mexico, Administration of the Patrimony of Public Welfare, CONADE, PEMEX, BIRMEX, National Institute of Psychiatry

Ministries: Education, Economy, Treasury and Public Credit, Labour, Social Development, Agriculture and Rural Development

Universities: Universidad de Montemorelos, Anáhuac, Tecnológico de Monterrey, Iberoamericana, ITAM, Cinvestav, The Cesues University of Sonora

Private partners: Tour de la Vida – Sanofi Aventis, Danone Institute, Voit, Bonafont, Alliance Francaise de México, Clínicas Angeles for eating disorders, Just for Teachers Association

Civil society organisations: Rotary Club, Club de leones, Junior League, Beneficiencia Pública, Franco-Mexican Foundation, Junta de Asistencia Privada (JAP–IAP), Fundación Campo y Salud, Mexican Association for Eating Disorders, National Academy of Medicine

Scientific expertise

Nutrition, psychology, epidemiology, physical activity, eating disorders, medicine

Public policy, education/pedagogy

Type of actions implemented

At central level:

Media coverage via TV and radio spots promoting the 5 PASOS

Training local project managers and their teams

Clinical guidelines delivered by National Center for Epidemiological Control (8 000 kits, 4 guides for patients), 88 clinical guidelines created for NCDs delivered by the Federal Ministry of Health México

Healthy municipalities, states and schools meetings (137 schools and 128 workplaces are 5 PASOS workplaces)

At local level: more than 250 000 people have been involved in one or more steps (among which 29 940 people have been measured physically). E.g.:

Step 1 "Get active": National campaign "football v/s obesity" (National Federation of Football and FIFA), videos of physical activity for employees in the workplace and promotion of traditional games and dances

Step 2 "Drink water": Easy access to clean drinking water (in parks, schools, and offices), healthy drinks contests, water purifiers at events and in meetings

Step 3 "Eat vegetables and fruits": Distribution of healthy menus and school lunches, entertaining kitchen actions and support given to local producers

Step 4 "Measure yourself": Body composition measurements in health stands and accessing the webpage where people can record the ground state of activities and their evolution

Step 5 "Share all the steps with your family and friends":

Events with public and political figures, e.g. national hug day walk/5 steps

Involvement of political stakeholders	The Minister of Health is a spokesman for the programme pushing public policy for health promotion. He is an example of the 5 PASOS programme and gets involved in activities. The State Ministers also act as spokesmen for information dissemination, pushing policy and getting involved in activities
Main results to date	• 6 ministries applying 5 steps in their work environment, reaching more than 14,025 people • 5 states launching 5 PASOS as their strategy (11 states as a goal in 2011) • 6 TV and 2 radio advertisements being broadcast daily on television on 440 TV channels and 750 radio channels reaching a 70-million-people audience • National "football v/s obesity" campaign to raise health awareness in the Mexican population utilising the football environment (broad media coverage reaching 35 million people weekly and 9 409 abdominal measurements made in stadia during football games in April 2011) • 15 826 people trained (as local project managers and their teams) • 27 states with 5 PASOS

Programme references:

www.5pasos.mx

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Chapter 9

Outcomes of the EPODE European Network and perspectives

Jean-Michel Borys

The EPODE European Network (EEN) has provided the opportunity, between 2008 and 2011, to document and conceptualise practices related to EPODE methodology to prevent childhood obesity. It has identified four pillars: the involvement of political representatives, methods and social marketing, scientific evaluation and public-private partnerships. It has also facilitated the implementation of EPODE and similar community-based interventions in European countries, regions and towns.

This final chapter highlights EEN outcomes and remaining challenges to accelerate the implementation of community-based interventions aimed at preventing childhood obesity and non-communicable diseases at European and International levels.

1. EPODE European Network outcomes

1.1. Overview of EEN activities

The EEN has sought to combine **applied research**, **consultation** and **dissemination** activities (Figure 1). This has been made possible with the support of the European Commission and the cooperation of the four associated universities and private partners. The organisational structure is summarised in Figure 2.

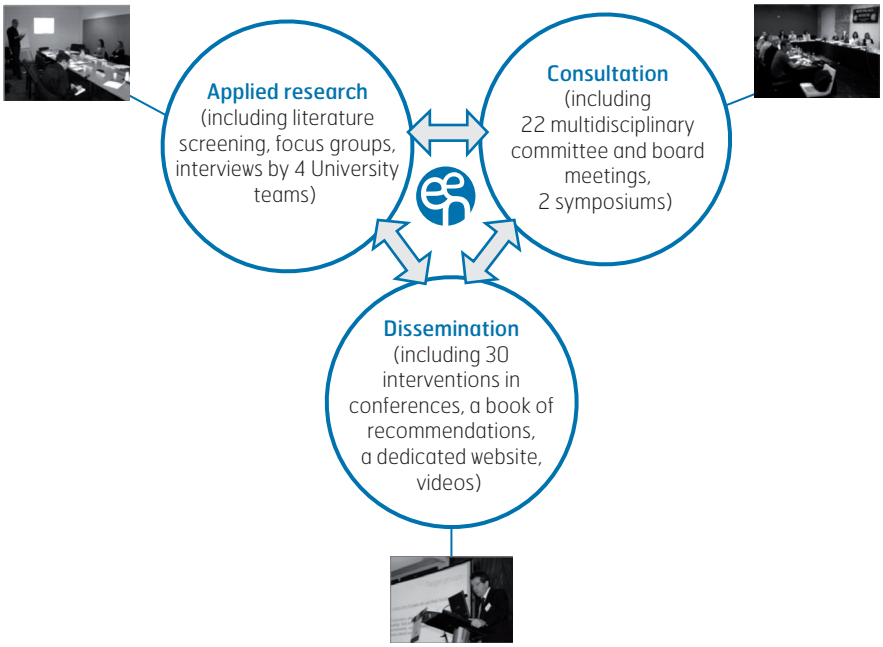

Figure 1: EEN Combined approach, 2008-2011

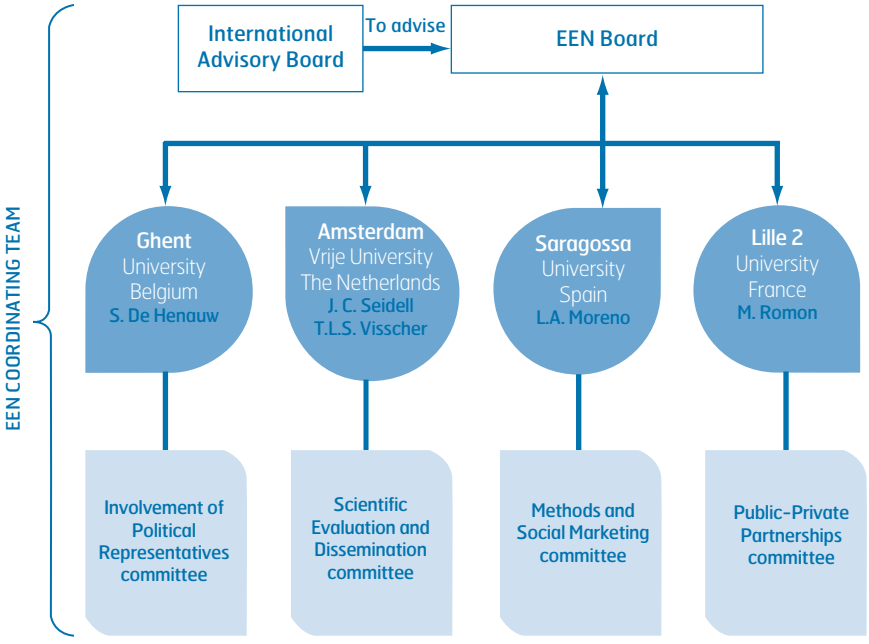

Figure 2: EPODE European Network organisational scheme

1.1.1. *Research conducted on the key role of local authorities*

The research demonstrates the importance of political decision-making at local level to provide a supportive environment for health promotion. For an EPODE-like programme to be successful, it is essential that local governments show real **leadership** on the issue of obesity prevention. The research team placed special emphasis on the need for local authorities to **identify the requirements and priorities of local stakeholders** and to identify and evaluate actions currently in place and those implemented in the past.

Their analysis also highlighted the multi-faceted role of local government in the fight against childhood overweight and obesity. Local authorities are better placed than anyone to **form a global view of local problems** and **identify the right levers**. They can promote and **incentivise the prevention network by the allocation of a specific budget**. They can drive actions forward and foster the **sustainability of such programmes over time**.

In addition, researchers noted that one of the most important roles of local government in the prevention of obesity is the **prioritising of target groups** (children, teenagers, etc.) and the mobilisation of relevant stakeholders who have direct contact with the target group. Local governments are best positioned to implement a **crosscutting policy** involving all sectors of the local community, thereby fostering synergistic action at a local level.

Finally, the research team recommends the development of "**learning networks**" in cities and municipalities to facilitate opportunities to share practical experience, enhance the effectiveness of the specific interventions in local communities and provide professional support to staff involved in delivering the programme. A good example is the **EPODE Mayors' Club** developed in the French EPODE Programme.

1.1.2. *Research conducted on coordination, methods and social marketing techniques*

Social marketing is being used on an increasingly frequent basis to tackle social issues, for example in the fields of public health and the environment. Social marketing adds a human dimension, and a fifth "P" – **people** – to the four "P" components of traditional marketing (Product, Place, Price and Promotion). The term social marketing has been in use since the early 1970s, and refers primarily to efforts focused on **influencing behaviours that will improve health**, prevent injuries, protect the environment and contribute to communities (Kotler and Lee, 2008). Studies have shown that the use of social marketing techniques can contribute to the effectiveness, efficiency and evaluation of different types of interventions that set out to change health behaviour.

In the EEN research, results from the literature review suggest that the interventions aimed at preventing obesity through changes in diet, physical activity, lifestyle and social support have been based on sound principles. However, it appears that there

is the potential to improve these outcomes, using social marketing techniques that utilise specific consumer insights into the factors underpinning human behaviour. For example, through the **segmentation** of interventions based on age, gender and socioeconomic profile of individuals, social marketing can address the underlying needs of the target group to help tailor interventions and **diverse solutions** to obtain positive effects.

It also appears that the strength of social marketing is to apply its principles and strategies in a **coordinated, sustained and innovative effort**. This is the case in the EPODE methodology. The qualitative research conducted has shown that **maintaining and integrating close communication between national coordination, local coordination, local stakeholders and the population is a key for a successful planning and development of community-based obesity prevention programmes**.

1.1.3. *Research conducted on public-private partnerships*

The public-private partnership (PPP) aspect of EPODE programmes can be defined as the "organisational cooperation projects" in which various types of expertise are brought together.

This research work revealed, in particular, that **strong governance** is important if PPPs are to work properly, especially governance that **takes the aims and specific characteristics of the various partners** into account. Complete **transparency** is essential in achieving this. The objectives of each partner must be visible and clear. The research team recommends the creation of a **code of ethics for partners**, setting out their rights and obligations, an approach that most EPODE-like programmes have already integrated. Effective codes recognise that all private partners must respect the philosophy of the programme in question and should not seek to influence the scientific content of the programme or use it for commercial purposes. To ensure that the unique characteristics of each partner are taken into consideration, clear partnership agreements should also be in place. Finally, the research team recommends the creation of an **independent steering committee** made up of representatives of the various stakeholders to monitor the implementation of the work, including the adherence to the ethical charter and to provide a forum for discussion of the programme between the various partners.

1.1.4. *Research conducted on scientific evaluation and dissemination*

Too often evaluation is seen as an additional programme component, requiring a lot of time and money. This perhaps explains why it is often planned after activities have started or at the end of programmes. It is, however, an **essential resource that allows programmes to be improved** and enhances sustainability.

Over the course of the three years, the EEN research focused on the creation and harmonisation of the scientific methods to be used in assessing the effectiveness

of the EPODE methodology implemented nationally and locally. At a local level, the group assessed the most suitable methods for gauging local mobilisation and monitoring children's weight.

The research recommends the **creation of an evaluation tool that can be adapted to each context and level of intervention** as an essential component for all community-based interventions.

The researchers recommend focusing not just on the results of programmes but also on the **processes** they involve. This is essential to help identify components that may need refinement or that are crucial to the effectiveness of the system. Given the importance of evaluation in prevention programmes, researchers advise that **10 to 15% of the overall budget** be dedicated to it.

In more specific terms, the effectiveness of programmes at local level is measured by **changes in the eating and exercise habits** of children and developments in the **prevalence of overweight and obesity** in children in a town. There are several methods for measuring children's weight. The researchers recommend to using the **body mass index** (BMI: weight/height^2), which is an inexpensive, simple and highly reliable tool that, at population level, has a strong correlation with children's body fat percentage.

1.2. Consultation

Over the 3 years of research, the EEN project used a multidisciplinary consultation process. The work in progress conducted by each of the four university teams was discussed during the **4 board and international advisory board meetings** and was presented, commented on and enriched by case studies and testimonials from participants in **15 committee meetings and workshops** held to discuss specific aspects of the work. These meetings were the opportunity to hear from more than **100 contributors from 16 European countries** focused on community-based interventions aimed at preventing childhood obesity, in particular:

- coordinators of EPODE or similar programmes;
- researchers in public health, nutrition, human and social sciences, social marketing and other disciplines;
- representatives of public health institutions;
- elected representatives;
- public health programme managers;
- private sponsors of EPODE programmes.

This consultation process enabled the development of the EPODE methodology by **combining evidence from research and practice, objective observations and real-life experiences**. In doing so, the EEN project has been enriched by an innovative and multi-sectorial platform at the interface of various contributors with different backgrounds (nutrition and public health, political sciences, marketing and business)

and operating in different organisations (not-for-profit organisations, national and local governments, academia, industries and communication agencies). This process is important in itself as a demonstration that **all sectors can be involved in cooperative projects** aimed at fostering multidisciplinary and multilevel solutions to complex public health issues such as obesity prevention.

Concrete demonstrations of these dynamics were given at the **two symposiums** organised as part of the EEN project and held in December 2009 and April 2011. At the latter event, the EU Directorate General for Health and Consumers introduced the meeting, followed by a lecture from a representative from the WHO Regional Office for Europe. EEN research results were presented by the university teams and presentations were given on obesity prevention via large-scale and sustainable community-based interventions from 10 countries. The participation of 180 delegates with 25 nationalities represented, echoed the multisectorial and cross-border contribution of the EEN project over its 3 years of implementation.

1.3. Dissemination

EPODE and the EEN research have raised much interest. Over the past 3 years, they have been globally presented in more than **30 major international scientific congresses and conferences**, and the **use of the EPODE methodology has expanded from three (France, Spain, Belgium)** to **six countries (with Greece, the Netherlands and Romania joining them)** across Europe**,** involving more than **300 towns** and **10.5 million inhabitants.**

1.4. Concluding remarks on EEN outcomes

As emphasised by the OECD (Sassi, 2010), "*social norms cannot be engineered. A coordination action by multiple agents is required to trigger incremental changes, but consciously influencing a wide range of actors, often with conflicting interests, to achieve a tipping point that would trigger a reduction in obesity has so far proved impossible.*"

Projects such as the EEN, backed by the European institutions are making important steps towards such a tipping point. Such a project can act as a "**catalyst**" in the implementation of EPODE and similar community-based interventions. The detailed documentation of the process is an important element in transferring the accumulated knowledge on what works and what does not, in order to foster action that can make a real difference.

An independent review on the advancement of the EEN work and of the level of project objectives achieved was also carried out during the intermediary and final stages of the EEN project (Annex 1). It highlighted the particular complexity of the project, where bringing together the results of the work of the four committees in a coordinated way

appeared to be vital for success. It showed that the work conducted across academic boundaries has proved both attractive and stimulating, resulting in findings and outcomes that can be adopted and adapted across political boundaries.

These encouraging remarks and the satisfaction showed by EEN partners over the 3 years of implementation of the project definitely call for building on EEN recommendations to develop new international cooperative projects aimed at reinforcing EPODE action in the field.

2. Building on EEN recommendations

The EEN project has generated will from several academic, political, institutional and corporate partners to pursue concerted efforts at European and international levels to **build further capacity** and **capability** in the development of large-scale community-based interventions to prevent childhood obesity and the spred of non-communicable diseases. This positive evolution already gave birth to two new initiatives.

The first initiative is the proposal of a new European project entitled **EPODE for the Promotion of Health Equity** (EPHE), in line with the EU public health programme making the development of innovative solutions to tackle health inequalities a key health priority, including in the field of obesity prevention.

The second initiative is the creation of a not-for-profit organisation entitled **EPODE International Network (EIN)**, designed to federate the existing community-based programmes using the EPODE methodology and build further capacity in the development of similar large-scale initiatives across the globe.

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Reflections on the EPODE European Network

Susan A. Jebb, Boyd Swinburn,
Members of the EPODE International Scientific Advisory Board

Almost 20 years ago a group of far-sighted researchers in France set up a community-based intervention (CBI) study in Fleurbaix and Laventie to promote healthy lifestyles among children. Today the project has grown into the international EPODE collaboration, stretching from France westwards to Mexico and eastwards to Australia, with more than 300 sites closer to home across Europe.

The enthusiasm for the EPODE concept at a local level is palpable among families, local practitioners and policymakers. In recent years this faith has been supported by documented evidence of the impact on obesity in the communities participating in the programme and EPODE has become a beacon for CBIs.

EPODE has all the hallmarks of a pragmatic and complex intervention, involving community participation, multiple stakeholders and operating in culturally diverse settings. None of the EPODE family of programmes are quite the same as another. This poses a challenge both for evaluation and for sustainable roll-out to new communities. While new sites can benefit from the experience and resources developed by their predecessors, the programme must be tailored to the local community. This begs the question - what is EPODE?

The funding from the European Commission (EC) over the last 4 years to establish an EPODE European Network (EEN) has allowed a close examination of the EPODE model. Early discussions within the International Scientific Advisory Board identified 4 key themes (i) political commitment/local ownership, (ii) support services, including social marketing, (iii) resources, sometimes including public-private partnerships and (iv) evidence and evaluation. Each of these themes has benefitted from its own dedicated research team. The EC investment has underpinned original academic research as well as enriching the practical know-how for the participating communities.

The contribution of the project to training and capacity-building to conduct CBIs across Europe should not be underestimated. Through a series of working groups, conferences and publications, the EEN has provided new opportunities for contacts between researchers from diverse disciplines spanning biomedical, social and political sciences and between academia, practitioners and policymakers. Like all CBIs, EPODE and its sister-programmes are a "work in progress", but this publication is an opportunity to share the lessons to date with others in Europe and beyond. Indeed, the ultimate goal for CBIs is that their influence spills over beyond their boundaries so that the 'prevention virus' spreads throughout wider populations.

Obesity is the most stark feature of the global crisis of non-communicable diseases. Its origins are complex, reflecting a clash between a biological system geared to avert starvation and 21st century lifestyles where, for most, food is plentiful and energy demands are low. Inevitably, the solutions to obesity will need to be multi-faceted and to reflect the values and social norms of individual communities. We are not there yet and it will need continued investment and endeavour at all levels from national and international governments and agencies, through local decision makers and involving academics, practitioners, business partners and families themselves. But the signs from the EEN are that we have moved well beyond the original aspiration of EPODE (**E**nsemble **P**révenons l'**O**bésité **D**es **E**nfants), "Together Let's Prevent Childhood Obesity", to a position where "Together we CAN prevent childhood obesity".

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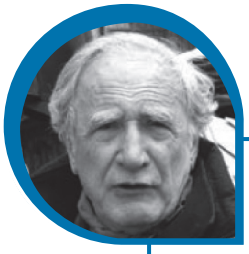
Jean Nève, VIASANO Expert Committee, Belgium
Linda Owen, Dumfries and Galloway Healthy Weight Community, Scotland
Frances Parry, Havering Primary Care Centre, UK
Cristiana Pavlidis, PAIDEIATROFI Programme, Greece
Neny Pervanidou, Athens University Medical School, Greece
Virginie Picart, Saint-Amand-les-Eaux, France
Thalia Porteny, 5 Pasos por tu Salud, Mexico
Stig Pramming, Oxford Health Alliance, UK
Geof Rayner, Brunel University, UK
Ana Rito, University Atlântica, Portugal
Mireille Roillet, Proteines, Belgium
Pilar Sanchez, Jerez de la Frontera, Spain
Joanna Saunders, Sheffield, UK
Jantine Schuit, National Institute of Public Health and Environment, The Netherlands
Gabriel Selma, Jerez de La Frontera, Spain
Ana Lucia Silva, National Institute of Health, Portugal
Luisa Sousa Otto, Ludicom, Portugal
Helena Stamou, PAIDEIATROFI Programme, Greece
Florence Suberu, Heart of Mersey, UK
Zsuzsanna Szucs, Hungarian Dietetic Association, Hungary
Joop Ten Dam, Zwolle, The Netherlands
Juan Jose Tenorio, Balaguer, Spain
Harry Thomason, LCA Consulting, UK
Hinde Tizaghti, Roubaix, France
Claudia Toma, Roman, Romania

Pierre-Antoine Ullmo, PAU Education, Spain
Monique Valaize, Béziers, France
Saskia Van Helden, Zwolle, The Netherlands
Edith Varet, Dunkerque, France
Tina Voulgari, PAIDEIATROFI Programme, Greece
Janet Voute, Nestlé S.A., Switzerland
Carole Weir, Change4Life, Sheffield, UK
Catherine Willems, Communauté de Communes de Flandre-Lys, France
Mark Williams, OPAL, South Australia

Annexes

Annex 1

External evaluation of the EEN project



Prof. Harry Thomason

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Harry Thomason PhD, Hon Dsc. CEO of LCA is a consultancy, specialising in health and education related issues. He was Pro-Vice-Chancellor at Loughborough University 1984-2003, Education advisor to the Singapore government, Ford Motor Company and BAesystems. He worked extensively in the area of underwater science supporting the oil industry. He also developed with colleagues new technology to support health and medicine and introduced drug testing into world sport. Lifelong interest in health and lifestyles. He is currently Council member of Lancaster University and Chairman of Crown bio Ltd.

The EPODE European Network (EEN) has been designed to facilitate the implementation of community-based intervention programmes (CBIs) using the Epode methodology as a base.

It has taken the findings from various Epode initiated pilot schemes, and the results of the deliberations of appropriate committees set up to address issues around the scheme and used examples of best practice in an attempt to set up and implement Epode-like CBIs in other countries. It seeks to contribute to the EU vision of a multi-stakeholder partnership united in its determination to provide healthier lifestyles, improve diet and physical activity habits, thus contributing to the prevention of obesity and chronic diseases.

Initially EEN saw the need to raise political, institutional and scientific awareness of the relevance and hopefully effectiveness of locally based, long-term multi-stakeholder approaches to the problem of obesity. It attempts to mobilise these multi-stakeholders into developing and sustaining key strategies that will be effective in the overall mission to reduce obesity in populations.

Using the framework of the Epode approach, an organisational structure was set up to take the project forward. Essential to the success of such a venture was the need to address diverse issues within a well thought out methodology that was supported by a sound overarching central coordinating team. The agreed organisation was approved and consisted of an independent advisory board, an EEN board and coordination committee. In addition four committees/pillars designed to look in detail at areas of relevance to the overall project were formed. These were:

1. The importance of political awareness, willingness and involvement (IPR).
2. Good practices for the scientific evaluation of Epode-like CBIs and the dissemination of the approach (SED).
3. The interest of network expertise and social marketing approaches (MSM).
4. The legal and ethical framework of public private partnerships (PPPs).

It was envisaged that the overall output would be in the form of an approved and supported methodology that would be utilised by at least 5 teams from EU Member States who would implement EEN/Epode like programmes in their own countries.

The external evaluation was seen as an independent view of the advancement of the project, the production of deliverables to date and an audit of the levels of achievement of the objectives of the EEN projects at month 24. This involved process evaluation only and did not include a review of the contents of the documents and deliverables produced. An internal audit of work was undertaken on a continuous basis by the Protéines team.

Two main questions were asked of the evaluator:

1. Has the range of meetings and proposed outcomes been achieved within the time scales allotted?

2. Have the deliverables outlined in the proposal been developed?

Both questions required a full audit of all the meetings and their outcomes within the agreed structure, where these achievements had been met and where they had not.

I was furnished with all the relevant documentation related to this project and in addition I conducted interviews with the four committee chairs and the EEN coordination team. Most of the achievements and the deliverables were satisfactory at month 24, with the exception of one or two that were noted and provision was made to ensure a favourable outcome.

The overall project was complex and bringing together the results of the work of the four committees in a coordinated way was vital for success. These four committees were university led with full central support. This resulted in a degree of independence and freedom of thought and action, which was good for the overall project. Motivation of these four committees was essential. All committees employed Post Doctoral Fellows to execute their day-to-day work. All experienced a challenge when the designated post holder left at some stage during the project. This was a problem that was not easily rectified. However each committee now has good replacements in place.

The rate of progress of the work of each committee within months 1 to 24 was different. All had been involved in agreeing their terms of reference (TOR), and work plans. Some found progress easier than others. The complexity of managing these four very different committees with a range of skills and experiences, their different agendas and hoped for outcomes, required some of them being overseen on a weekly basis by the EEN coordinating team. Regular phone meetings were held with the four chairs and their post doc fellows.

Each of these committees was tasked with reviewing their individual area of study, disseminating the information and formulating the enrichment of existing knowledge, instigating appropriate new methodologies and producing best practice. All these committees benefited from having a chair that was a major figure within their academic discipline. Three had previously been involved with EU projects and the fourth was involved in a quick learning curve. All four were involved in drawing up their TOR, the composition of the committee, and contributing to the genesis of the project and its application for funding.

Multidisciplinary working proved enlightening in some instances, for example, links between medicine and politics and medicine and law. The opportunity to work across academic boundaries has proved both attractive and stimulating, resulting in some interesting new approaches to problems within a particular discipline. The bringing

together of theoretical experts and people working in the field was good. All thought more interaction between the committees would be a good idea.

Some examples of comments by various chairs are interesting:

"The idea of interdisciplinary teams working on multifaceted projects was invigorating. Human problems cannot be tackled successfully by one strand of knowledge. Need a whole view of the complexity of human interaction to ensure a modicum of success."

"University departments/academic subject areas can be very insular, this is the silo effect, this programme is much more open and work across silos has taken place."

"The flexibility of project coordination allowed some interesting developments to take place. New knowledge and expertise was acquired from the diversity of individual committee members."

In order to push the bounds of knowledge, we have had to take on very difficult problems and look for ground-breaking approaches. The PPP committee is a case in point. If one is to have an effect on a problem, then all aspects pertaining to that problem must be investigated. This committee has included major food and drink manufacturers in their work. Interesting deliberations and outcomes are emanating from the work of this taxing committee, which could lead to new initiatives with the manufactures in the future.

The results of this project will hopefully produce a meaningful and eventually successful approach to tackling the causes of and preventing obesity. The resultant deliverables in the required format is essential if the results of this study are to be used effectively. The dissemination strategy has been rolled out via a dedicated website, newsletter and 1st EEN Symposium, press releases and Epode toolkits. EEN information has been presented in appropriate formats at international meetings. The organisation of the 2nd Symposium is to disseminate the final guidelines that have been developed by each EEN committee. Further public relations activity and publicity of the EEN/EPODE scheme is on going. It is vital that the information from this study is made available to the 5 teams that will be commissioned to implement the scheme in their countries.

This project has aimed to include all the main players from the various constituencies in their deliberations. It is a good example of what the EU is trying to achieve within DG Sanco. The supporting of sustainability and the demonstration of contact with the real world is seen in the case of this study. It is identifying the problems, addressing all the issues and presenting clear findings and outcomes that can be adopted and adapted across political boundaries to be a major influence on the health of our nations now and in the future.

Annex 2

Private partners' statements

FERRERO

epode european network

Ferrero's Statement

Ferrero has always encouraged a healthy lifestyle, especially for young people, based on physical activity and a responsible consumption of its products.

This commitment is, inter alia, demonstrated by:

- mainly targeting our commercial communications to parents, in order to support their crucial role in educating their children to a balanced diet and a healthy lifestyle;
- providing parents with products whose portion sizes allow them to ensure a balanced consumption by their children.

Obesity is a complex and multi-factorial issue, resulting from a combination of different causes, such as genetic predisposition, unbalanced diet, socio-economic factors and, most of all, sedentary lifestyle. In the context of the current obesity debate, adequate attention should be drawn to the equation energy-in energy-out. Industry has acknowledged the relevance of this factor and undertaken a series of actions, including programmes aimed at promoting physical activity and a healthy active lifestyle, especially among children.

Although the food industry cannot educate consumers without the support of National Authorities, it still has a role to play, namely by supporting public education programmes endorsed by relevant Institutions and Governments.

EPODE ("Ensemble prévenons l'obésité des enfants"), initially launched in some selected French villages, provides precisely this kind of opportunity, as it is supported by both public and private entities, with different fields of action. The programme itself is run by Public Authorities, while private partners do not interfere with the planning and execution.

For the above reasons, in the framework of the European Platform on Diet, Physical activity and Health, Ferrero committed to supporting the EPODE Programme, as well as the European Epode Network (EEN).

The European Platform on "Diet, Physical Activity and Health" has, in particular, highlighted the necessity of working in a multi-partnership way, involving all sectors of society, in the public as well as private domains. Thus, the "EPODE European Network" was launched, with the support of DG SANCO of the European Commission. The objective of the EEN is to extend these projects and to provide a more formal structure for sharing best practices, so as to allow for a wider application of the EPODE Programme.

FERRERO's commitment to support EPODE includes the following:

- contributing to the funding of the activities of EPODE in France (from 2006 to 2011), as well as in the additional countries where the Programme was subsequently launched: Belgium (VIASANO) from 2007, Spain (THAO) from 2008 and Greece (PAIDEIATROFI) from 2009;
- contributing to the funding of the EEN, from June 2007 to December 2010. This financial support contributes to the following activities:
  - production and dissemination of concrete guidelines and best practices within a "think and do tank", coordinated by the EEN,
  - raise of specific political, institutional and scientific awareness of the relevance of local, long-term and multi-stakeholder approaches to set up CBIs applied to childhood obesity prevention in other countries and regions,
  - identification of teams or interested contributors to get involved with in an EPODE-like programme in other countries, regions and cities.

Ferrero is also represented and actively contributes to the board meetings of the EPODE European Network project once a year and to committee meetings, especially the one focusing on "Public-Private Partnerships".

MARS incorporated

epode european network

Mars' Statement

Why is Mars interested in the EPODE approach?

Our French Mars associates followed up with great interest the success story of Epode initiated in 2 small towns (Fleurbaix and Laventie) in the North of France in 1992, and today it is implemented in more than 220 towns. This 8 year school based intervention study was the first demonstration that integrating nutritional education into school programmes could modify children's and their families' eating habits. The 4 following years combining the same type of school intervention with broader community-based actions confirm the influence of such programme involving the whole population in modifying obesity prevalence. This Fleurbaix-Laventie experience has always been mentioned as THE reference study for the prevention of childhood obesity in the course of Mars health & nutrition discussions.

Why is Mars supporting the EPODE European Network (EEN)?

For Mars being present in all European markets, it appeared obvious that it would be relevant to contribute to the implementation of such efficient Community-based Intervention programmes all across Europe. At Mars we are convinced that only a holistic approach with the maximum of actors can reverse the current obesity trend on a long-term basis. Obesity is a multi-factorial disease, therefore the Epode approach combining educational programmes, practical lessons (cooking, markets visits, manufacturing or agricultural food production visits...), promotion of physical activity, city involvement and main determinants of life habits construction is really the most appropriate strategy to achieve positive results on a long-term basis. The private-public partnership is the most efficient way to tackle such a public health issue. This is why Mars showed a strong interest in contributing to set up the EPODE EUROPEAN NETWORK and associating its name to this network.

This support is fully in line with Mars social responsibility

Since the 1960s Mars has been a pioneer promoting a healthy lifestyle across Europe. Today, we have a nutrition & health strategy with seven pillars (renovate our portfolio, reduce portion sizes, innovate, inform the consumer, practice a responsible marketing, promote a varied and balanced diet and an active way of life, support research and effective programmes for a better health of our consumers) – this is perfectly coherent with Epode methodology. As a member of CIAA, Mars is active at the EU Platform on Diet, Physical activity and Health that has also highlighted the necessity of working in a multi-partnership way involving all sectors of society both in the public and private domains. Mars is proud to bring both financial support and intellectual contribution through its active participation in the activities of the committees led by 4 European universities. Mars would recommend to all partners involved in EPODE to communicate the EPODE achievements even better in the future.

Nestlé's Statement

Why is Nestlé supporting EPODE?

Nestlé as a Nutrition, Health and Wellness Company is committed to encouraging healthy lifestyle, which includes helping tackle the public health challenge of overweight, obesity and non-communicable diseases. We do this by offering consumers ever healthier and tasty products, allowing consumers to make an informed choice by providing meaningful labelling and marketing our products in a responsible way.

The obesity pandemic, by its multi-causal character, calls for multi-stakeholder approaches. Through the "Nestlé Healthy Kids Global Programme", Nestlé is engaged in nutrition education programmes aimed at raising nutrition, health and wellness awareness of school-aged children around the world. Nestlé believes that getting regular physical activity and establishing healthy eating habits help children achieve and maintain a healthy body weight, which will enable them to be healthy adults. Education is therefore a powerful tool for ensuring that children understand the value of nutrition and physical activity to their health through the course of their lives.

HEALTHY KIDS programmes are designed and implemented in collaboration with national health authorities, child nutrition experts and/or education authorities and health experts. There are now 56 programmes operating globally and Nestlé intends to develop partnerships aimed at implementing HEALTHY KIDS in all countries where we have operations by the end of 2011.

One of Nestlé's most important commitments within the Nestlé HEALTHY KIDS programme is our support of EPODE. Already in 1992 Nestlé France, as the first company, started to develop a long-term partnership with 2 major community programmes: FLEURBAIX-LAVENTIE VILLES SANTE and later with EPODE in 2004. Nestlé is now also supporting the roll out of EPODE in other European countries.

Multi-stakeholder programme

By providing some evidence that multi-stakeholder programmes involving the entire community can lead to a significant decrease or stabilisation of the prevalence of children obesity, EPODE distinguishes itself from other projects. Nestlé find the concept very interesting and it is now a challenge to get a wider acceptance of the methodology in additional communities throughout Europe and to further develop monitoring tools for the evaluation of the projects. This is why Nestlé in 2007 decided to expand our EPODE commitments and to sponsor the European EPODE Network (EEN) with the aim to scale up EPODE and accelerate such initiatives by developing guidelines and disseminating good practices including Public-Private Partnerships. Partnership means not only economic support but also being involved in the "thinking process".

Nestlé decided to support projects like EPODE/EEN because we also believe we can make a difference by bringing our knowledge, experience and science to the table. Encouraging good nutrition and healthy lifestyle makes good business sense and at the same time we can help kids to a healthy start in life. This is for us Creating Shared Value.

Creating value not only for the company but also for the society long term wise is Nestlé's approach to CSR. This is embedded in our core business strategy and not an add-on.

ORANGINA SCHWEPPES Group

epode european network

Orangina Schweppes' Statement

Orangina-Schweppes is a partner of the EPODE European Network project since June 2009 but also became at the same time a Gold partner of the EPODE programme in France, of the VIASANO programme in Belgium, and of the THAO programme in Spain. This statement presents the commitment of the group in supporting the EPODE approach and its deployment.

The Orangina Schweppes nutrition commitment is much more than a responsibility. Indeed, it is both a corporate mindset and a soft drink manufacturing development model based on diversity. Our nutrition commitment relies on a simple and fundamental conviction: our products do have a role to play in a balanced diet, when consumed in a reasonable way and, when integrated into a healthy lifestyle.

OUR ACTIVITY

We provide consumers with a wide range of soft drinks often containing fruits and flavours. Our products feature a large range of tastes and optimised added sugar content.

OUR DRINKS: quality and naturality

The common denominator to most of our recipes is the use of natural ingredients, such as fruits. We aim at offering a wide and diversified range of refreshing drinks which answers the growing demand for naturality and encourages consumers to maintain hydration. To do so, we propose them an increasing number of flavours that enhance the fruit taste.

We reduce the added sugar content of our soft drinks. We reduce the added sugar content of our recipes, both in our existing soft drinks and in our innovations. We develop our light soft drinks portfolio.

Our development model is based on recipes for high-quality products, local anchorage and differentiated cultures, and above all on consumer health and well-being.

Orangina Schweppes, a committed group:

The fruit at the very heart of our development: we want to develop the consumers' liking for fruit and products containing fruit or fruit juice. We participate in the research about the connection between the fruit taste and the fruit consumption.

Well-informed consumers: it is key for consumers to have optimal nutritional information so that they can better control their overall diet. Thus we add nutritional information on all our products through boards of nutritional values and Guideline for Daily Amounts indication.

A supervised marketing policy: we have designed a specific Code of conduct for advertising (ban of advertising to under 12s).

Products nutritional optimisation: we progressively reduce the added sugar content of our soft drinks. Our drinks contain very few and as natural as possible additives. They are limited to the bare minimum.

The promotion of a healthy lifestyle

Our marketing policy is adapted both to our development model and our corporate mindset.

Why have we decided to join the EPODE programme?

- EPODE and Orangina Schweppes share together common values: a balanced diet, with no product stigmatisation, in accordance with the biological rhythm, and combining diversity and pleasure.
- Orangina Schweppes supports an evidence-based, differentiated and independent initiative aimed at preventing childhood obesity, involving national and local stakeholders in a sustainable solution
- At European Level , Orangina Schweppes together with other partners from the Private and public sector, including the European Commission wants to contribute to the development of EPODE Programmes.
- Orangina Schweppes wants to contribute to maintain populations and consumers in good health contributing to obesity prevention especially childhood obesity.

This support is consistent with the movement for a long-lasting health fostered by Orangina Schweppes.

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