Final report

An EU-wide overview of community-based initiatives to reduce childhood obesity

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Table of contents

Executive summary

BACKGROUND

In Europe, about 10-30% of adults are obese. Estimates of the number of overweight infants and children rose steadily from 1990 to 2008. The complex aetiology of obesity and the likeliness of developing habits for unhealthy eating and physical activity during the early stages of childhood have specifically encouraged the use of community-based initiatives (CBIs) to combat childhood obesity. A CBI generally consists of a combination of strategies implemented at a local level that target the environment or the community's capacity (instruments) or individuals directly (activities). CBIs are considered as good practice in obesity-prevention policies, as obesity cannot be solved solely by an individual but rather, multi-sectoral responses are required to create a healthy environment.

AIM OF THIS REPORT

In 2010, the European Commission called for a project to create an overview of European CBIs that aim to reduce childhood obesity. This report presents the outcomes of this survey. Its target audience concerns policy makers at different levels, but also public health professionals involved in executing CBIs. The report therefore applies a practical approach. It presents results on obesity policy and CBIs in general, the degree of implementation and costs, the contents of CBIs, quality indicators, reported effectiveness of CBIs and practical experiences as reported by the CBI coordinators. In the overall conclusion, the gaps in information are presented and recommendations for policy makers. Finally, for public health professionals, the report contains a section on 'how to use this report as a practical toolkit?'.

METHODOLOGY SURVEY AND NUMBER OF INCLUDED CBIs

Eligible projects were implemented between 2005 and 2011, conducted activities over at least one year, were accompanied by a process evaluation, and complied to inclusion criteria which were based on the WHO definition for community-based initiatives in general. The health objectives had to involve obesity, physical activity and/or nutrition. A two-step procedure was created to identify CBIs in the 27 European Union (EU) countries and Iceland, Liechtenstein, Norway and Switzerland. First, existing data sources were inventoried and key informants in each country were asked to report CBIs and names of contact persons (April-June 2011). In a second step, CBI contact persons were approached by email with an electronic questionnaire to gather detailed information on the CBIs identified (end of May-July 24th 2011). The electronic CBI questionnaire contained 36 questions divided in six sections, namely the general characteristics of the CBI, settings and organizational structure, objectives, instruments and activities used in the CBI, evaluation and effectiveness, and general questions. Most questions were pre-structured and respondents could click the applicable option.

In total, 278 potentially eligible CBIs were identified and 88 respondents completed the CBI questionnaire. Four responses considered national action plans, so they were excluded and one CBI was too old; thus 83 CBIs were analysed, implemented in 17 countries.

RESULTS

➢ Obesity policy and community-based initiatives in Europe

The key informants reported for 24 countries that childhood obesity is a priority issue at a national level and twelve countries had developed 'model' CBIs within their national policy (for 7 out of 31 countries the key informant did not respond). The 278 potentially eligible CBIs identified in the survey represent about half of the CBIs implemented in Europe from 2005-2011, based on a rough estimation. Childhood obesity being a priority policy issue and a high perceived need to take action were the most significant determinants of initiating CBIs at a local level. Both options were chosen by 77% of the CBI respondents out of a list. Co-financing from a national source was provided for 55% of the CBIs.

Out of 83 included CBIs, 49 were executed at a city or neighbourhood level, 21 at a school level, and 13 at other levels. In 80% of the CBIs at the city level, the school was the primary (n=21) or additional setting (n=18). Children were the exclusive target population in 64% of the CBIs; the other CBIs also targeted people older than 17 years of age. In 66% of the CBIs, the activities were implemented in more than one setting or throughout the neighbourhood, and 84% targeted both nutrition and physical activity and/or body weight specifically.

➢ Degree of implementation: number of children and costs

For France, Hungary, Iceland, Spain and Sweden the included CBIs targeted at least 5% of the total youth population from 0-18. Counselling by health care professionals was performed in 44 CBIs, and reached most European children; an approximate total of 700,000. Approximately 275,000 children were reached by free provision of healthy foods. Thirty-five CBIs reported the amount of funding they had received, with a median €200,000 per CBI and a total €32 million from 2005 and 2010. Fourteen CBIs reported the costs per child, which ranged from less than €1 to more than €300. The interpretation issues are described in the report.

➢ Instruments and activities used in CBIs

The included CBIs are comprehensive projects involving multiple strategies at a local level. The vast majority (93%) implemented a combination of instruments, targeting the environment of the children, and activities. The most frequently reported instruments were strategies related to professional training (70%), actions for parents (73%), and actions targeting change in the social environment (55%). The most frequently reported educational activities that directly targeted children, were education about a healthy lifestyle (89%), group education (88%) and counselling sessions (57%).

➢ Quality indicators

The reported CBI information was evaluated according to the following quality indicators: availability of primary source document, performance of process evaluation, availability of information on CBI content (instruments and activities), the goals of the CBI, information on reach of CBI activities, the funding system, presence of a theoretical basis, costs of the CBI, and sustainability and transferability of the CBI. In general, most of the CBIs complied with these indicators. For example, 78% of the CBIs indicated presence of a primary source document, and 64% indicated that theoretical models had been used to develop the CBI. A minority of CBIs reported information about the reach of activities, the costs per child reached, and effectiveness of CBIs. The quality indicators are listed for all projects in an annex.

➢ Reported effectiveness

In total, 22 CBIs reported data on study design characteristics and the effectiveness of the CBI as a whole. Seven CBIs reported reductions in overweight prevalence rates from 0% to 6% over time. Three CBIs reported short-term reductions in mean BMI between 0,3 and 1,2 kg/m^2 for overweight children, using a non-optimal study design. Effects on dietary intake and physical activity were heterogeneously reported and included, for example, fruit intake, sweets and beverages, sedentary behaviour and vigorous activity. Furthermore, positive effects were reported on general well being, feeling healthier and knowledge. It is difficult to compare and/or highlight results due to the heterogeneous outcomes and wide variation in the quality of the study designs.

➢ Practical experiences as reported by the CBI coordinators

The report summarizes practical experiences as reported by the CBI respondents. These concern both positive experiences and key factors for success in their eyes, as well as barriers when executing the CBI. With a few exceptions based on specific elements, all contact persons considered their CBI as transferable to other international locations. This was due to the flexibility of CBI designs that—almost by definition—allow for adaptation to local situations. Several projects mentioned that they developed protocols, documentation of practices, and handbooks for this purpose. The respondents considered continuous monitoring of further implementation as important for learning from new experiences and fine-tuning their CBI.

OVERALL CONCLUSION AND RECOMMENDATIONS

The survey revealed that **attention for obesity at an (inter)national level has stimulated implementation of hundreds of CBIs in European countries in recent ye**ars. This report summarizes information for 83 of them. Although the included CBIs showed a wide variation, common characteristics were also identified. **Almost all included CBIs executed a mixture of strategies at a local level**. The school was an important setting in the majority of CBIs,

and teachers were often involved as providers of the activities, as well as health professionals other than medical doctors.

For most quality indicators, a majority of CBIs reported compliance, but the following **gaps in information** were identified: information was least available for the reach of activities, the costs of the CBI and effectiveness of CBIs. In addition, more evidence is needed regarding the long-term effects of specific intervention activities that can be incorporated in future or on-going CBIs. More insight is needed for methods to overcome reported barriers at a local level, specifically regarding the role of the (national) policy context.

In addition to this report, we recommend that a **database facility** become available, accompanied by a search function to locate (specific elements of) CBIs and the option to download materials, documents, handbooks, and transfer systems. Easy accessibility of high-quality intervention materials will stimulate the improvement of CBIs. It is recommended that the possibility to continuously update information on effects, costs and reach, as well as other issues be included. For the purpose of comparing CBI (activities), we stress the need for a standardization of evaluation methodology and data collection.

National policy makers can stimulate future implementation by prioritizing childhood obesity as a policy issue and facilitating the implementation of CBIs in the following way: make model CBIs available as protocols/handbooks that professionals can use, as is currently the case in at least 12 countries. These materials should be flexible, because of required adaptation to local contexts. In addition, one may consider promoting this report to professionals in order to develop/improve CBIs, since it contains a section that serves as a 'practical toolkit'. Sustainable (partial) funding should be provided through uncomplicated administrative funding systems, to stimulate intersectoral collaboration and public/private partnerships, and to promote an exchange of information and experiences. Finally, we would particularly emphasize the need for supporting high-quality research/monitoring in the general youth population in cities where CBIs are implemented. We also recommend high-quality research to evaluate specific intervention strategies, with clear objectives aimed at specific age groups or overweight children, to be incorporated in future/on-going CBIs.

In conclusion, this report can inspire the development of new initiatives or improvement of on-going CBIs. Prioritizing childhood obesity and facilitating the implementation of CBIs within a national policy framework are important conditional factors, but the local context and the community needs should be the primary entry point. Regarding an optimal CBI, the available evidence suggests 'the more comprehensive, the better'. The present report and the database can assist in developing and achieving an optimal approach.

Acknowledgements

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We also thank all the key informants in the European countries involved in this project for their help in identifying CBIs and for providing us with information on the obesity policy in their country by completing the short questionnaire.

Contact persons by country – Completed short questionnaire

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Contact persons by country – Provided suggestions for CBIs

F. Wagner (Austria), I. Laquiere (Belgium), S. Petrova (Bulgaria), E. Gottvaldová (Czech Republic), G. Hummelmose (Denmark), A. Sammel (Estonia), P. Kyttälä (Finland), L. Razanamahefa (France), A. Potz (Germany), V. Benetou (Greece), Hungary (E. Martos), E. Martos (Hungary), Tryggvihe (Iceland), U. O'Dwyer, N. NicGiobuin, S. Keenan (Ireland), S. Majerus (Luxembourg), L. Pace (Malta), O. Samdal (Norway), M. Bevc (Slovenia), L. Lissner, L. Schäfer-Elinder (Sweden), S. Frei (Switzerland), L. Ells, K. Roberts, J. Weeks (United Kingdom)

Finally, we thank all the experts who took the time to complete the electronic questionnaire, providing us with detailed information about their intervention.

1. Introduction and aim of report

In Europe, the high prevalence and adverse effects of obesity and overweight are a public health concern. As about 30-70% of adults are overweight and 10-30% of adults are obese the situation is considered to be epidemic (1). Estimates of the number of overweight infants and children in the WHO European Region rose steadily from 1990 to 2008 (2). Measures have been undertaken on behalf of the European Commission. The EU Health Programme (2008-2013) finances relevant projects and initiatives. In particular the Work Programmes of 2006 and 2007 paid explicit attention to school-based and multi-stakeholder initiatives (3, 4). The EU platform on Diet, Physical Activity and Health (2005) serves as a venue for debate and contributed to the development of a Strategy on Nutrition, Overweight and Obesity health issues. In 2007, the High-level Group for Nutrition and Physical Activity was established to ensure the exchange of policy ideas and practices and to liaise with the EU platform to enable fast communication between sectors. In May 2007, the European Commission launched the White Paper on a Strategy for Europe on Nutrition, Overweight and Obesity Related Health Issues. One of the actions is the development of an evidence base to support policy making (5).The European Health Information Strategy provides added-value through information exchange enabling comparisons of various strategies as well. Also, WHO Regional Office for Europe facilitates information sharing about strategies for preventing childhood obesity

The complex etiology of obesity and the likeliness of developing unhealthy eating and physical-activity habits in the early stages of childhood have specifically encouraged the use of community-based initiatives (CBIs). A CBI generally consists of a combination of strategies implemented at a local level that target the environment or the community's capacity (instruments) or individuals directly (activities). CBIs are considered good practice approaches within obesity prevention policies, as obesity cannot be solved by the individual alone and generally requires community actions and multi-sectoral responses to create a more stimulating social and physical environment (6, 7).

The European Commission has identified the need for an overview of the CBIs implemented from 2005-2011 in Europe, as a support to the Health Information Strategy. A survey aimed at providing this overview was executed by the Dutch Institute for Public Health and the Environment (RIVM). This report presents the outcomes of the survey. Its target audience concerns policy makers at different levels, but also public health professionals involved in executing CBIs. The report therefore applies a practical approach. First, it contains information on obesity policy in European countries, in particular regarding CBIs. Thereafter the variation in included CBIs is described, the degree of implementation and costs of the included CBIs, the contents of the CBIs, quality indicators, reported effects and reported practical experiences. The report ends with the overall conclusion and recommendations for policy makers, and a separate section on 'how to use this report as a practical tool?'.

2. Methodology

Inclusion criteria

Eligible CBIs had to have been implemented between 2005 and 2011, with activities over at least one year, and accompanied by a process evaluation. Furthermore, inclusion criteria were defined that were based on the general WHO definition for community-based initiatives (8). The aspects within this definition of 'full community ownership' and 'bottom-up' were operationalised in indicators related to the involvement of the target population. The aspects of 'integrated' and 'intersectoral collaboration' were operationalised by indicators related to the number of (local) organizations involved in executing the CBI. Since the topic is preventing childhood obesity the health objectives had to involve obesity, physical activity and/or nutrition. Annex 1 describes the general WHO definition for community-based initiatives and the inclusion criteria for this survey.

Data collection method

A two-step procedure was created to identify CBIs in the 27 European Union (EU) countries and Iceland, Liechtenstein, Norway and Switzerland. First, for each country we identified key informants who were asked to report eligible CBIs and contact persons for each CBI, and to answer a few questions about the obesity policy context for their country (time frame: April – June 2011). Annex 2 presents this short questionnaire. In a second step, contact persons for CBIs were approached with an electronic questionnaire to gather detailed information on the CBIs identified (time frame: End of May – July 24th 2011).

With the exception of Liechtenstein, The key informants were identified through the Nutrition Focal Point network of the WHO Regional Office for Europe for WHO member states, and through suggestions from advisors and members of the High-level Group for Nutrition and Physical Activity. Therefore, key informants were approached for a total of 30 countries.

In addition to suggestions by key informants, potentially suitable projects were simultaneously identified through other channels. Annex 3 shows an inventory that was made of existing overviews on obesity projects and international databases. Furthermore, the WHO Regional Office for Europe provided an overview of obesity prevention projects, which was collected in 2008, and key informants could use this list to begin. Finally, we collaborated with G. Buijs, MSc (coordinator of the Schools for Health Europe Network), who approached persons in the network requesting suggestions for additional projects.

Number of CBIs identified during the survey and response

In total 278 potential eligible CBIs were identified, and 260 were subsequently approached by email with the electronic CBI questionnaire; for the remaining 18 CBIs, the email address was not functioning. Annex 4 provides an overview of the 278 identified projects and the method of identification. Out of the total 260, 88 (34%) completed the electronic CBI questionnaire, but four of these projects were excluded because they concerned national action plans and one CBI was excluded because the reported period of implementation fell outside the 2005-2011 time period. Thus, in total, 83 projects were available for the analyses, implemented in 17 countries (table 1).

Table 1. Number of included CBIs and total number of identified projects per country

Belgium	3 (11)	Latvia	1 (1)
Czech Republic	1 (2)	Netherlands	14 (27)
Denmark	2 (10)	Poland	2 (2)
France	4 (9)	Romania	2 (2)
Germany	5 (8)	Spain	12 (29)
Greece	2 (3)	Sweden	7 (22)
Hungary	3 (5)	Switzerland	2 (8)
Iceland	2 (3)	UK	17 (78)
Ireland	4 (12)		

Developing the CBI questionnaire

To determine what information should be collected with the questionnaire for each CBI, we first summarized items in three existing databases: the Trials Register of Promoting Health Interventions (TRoPHI), The Canadian Best Practices Portal, and The European Directory of Good Practices. Next, we supplemented these items with items mentioned in the tender specifications and added items thought to be relevant. Consequently, the items in the CBI questionnaire are based on existing databases, requests in the tender specifications, and input from the RIVM team. Annex 5 provides an overview of the items. Four experts reviewed a draft version of the CBI questionnaire in April 2011. Based on their comments, the questionnaire was adapted and programmed into an electronic questionnaire that was distributed via an email link to all CBI contact persons. A CBI questionnaire in Microsoft Word was sent to the CBI contact persons to prepare for the electronic questionnaire. The CBI questionnaire contained 36 questions divided in six sections: the general characteristics of the CBI, settings and organizational structure, objectives, instruments and activities used within the CBI, evaluation and effectiveness, and general questions about national registries. Most questions were pre-structured and respondents could click the applicable option. Annex 6 presents the Microsoft Word version of the CBI questionnaire.

3.1 Obesity policy and community-based initiatives in Europe

KEY MESSAGES

Based on the short questionnaire as completed by the key informants:

- Childhood obesity is a priority issue at a national and/or regional level in all European countries
- Twelve countries reported having model CBIs developed and/or available within a national policy context

Approximate estimation of total number of CBIs:

The 278 identified projects in this survey represent about half of the CBIs that have been implemented in Europe from 2005-2011

Based on the CBI questionnaire as reported by CBI contact persons:

The fact that childhood obesity is a priority policy issue and a high perceived need for action are the most important determinants of initiating CBIs at a local level. Both options were chosen by 77% of the CBI respondents out of a list.

Obesity policy context in European countries

For 24 countries (out of 30 approached) we obtained information about the general policy context for childhood obesity based on the short questionnaire (see annex 2). All key informants reported that prevention of obesity in children is a priority issue in their general health policy at a national and/or regional level. They were also asked to select the option in a list that best reflected their policy context according to CBIs, and the results were as follows:

- There is a central policy regarding CBIs targeting childhood obesity; local initiatives are in most cases derivations of a limited number of central/national examples.

  Countries to which this applies: France, Luxembourg, Poland

- There is no clear central/national policy on CBIs targeting childhood obesity, but (probably) many CBIs are implemented through local initiatives.

  Countries to which this applies: Austria, Estonia, Finland, Greece, Ireland, Sweden

- A combination of the above two options is the case: a central/national policy (involving 'model CBIs') and besides that also probably many initiatives at a local level, which are not clearly related to the CBIs that are supported as 'model CBIs' in the national policy.

  Countries to which this applies: Bulgaria, Denmark, Hungary, Germany, Italy, Netherlands, Slovakia, Spain, United Kingdom

- There is no clear central/national policy on CBIs targeting childhood obesity, and not many CBIs are implemented through local initiatives either.

  Countries to which this applies: Iceland, Latvia, Norway, Romania

- None of these options does adequately describe the situation in my country:

  Countries to which this applies: Belgium (not centrally organized but in 3 communities and 3 regions); Malta (obesity plan now available in draft; thus far mostly school based and CBIs around physical activity);

In summary, the results show that 12 countries reported having model CBIs developed and/or available within a national policy context. Through making available protocols/handbooks, the application of these models can spread, with the understanding that the exact execution may differ due to adaptation to local circumstances.

Estimation of total number of CBIs

This report focuses on CBIs that are implemented at a local level. During data collection, several key informants pointed out that their CBIs are implemented in the context of national action plans, and—although not meant for this purpose—the CBI questionnaire was completed for four national action plans. For some countries it was impossible for the key informants to undertake the efforts necessary to identify all suitable projects at a local level within the timeframe of the survey, due to time constraints and/or complexity of organizational structure. National databases and/or registries were available for only four countries.

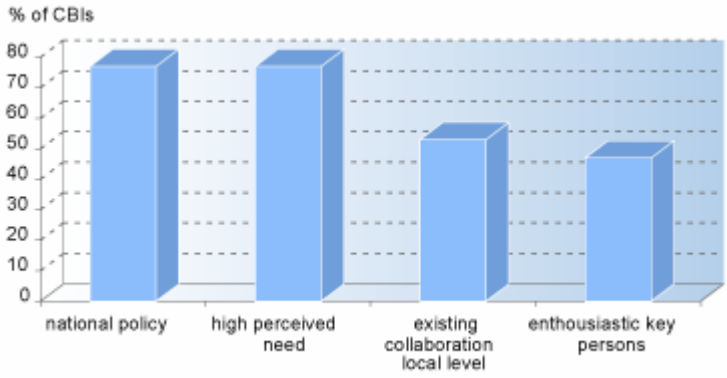
In the survey we identified 278 potentially suitable projects, which are listed in annex 4. For the Netherlands, extensive efforts were made at several levels and the 27 projects are considered to provide a complete picture. We calculated the number of projects per 100,000 children in the Netherlands (e.g. 0,7) and used this ratio to estimate the number of projects for the other European countries. Thereby, we also took into account the opinion of the key informants about completeness of projects and the policy context around obesity (CBIs). Annex 7 explains the estimation procedure in more detail.

Based on this methodology was estimated that we had identified about half of all European CBIs. The absolute difference between the identified number of projects and estimated number of projects was largest for Germany (99), Italy (77), Spain (34) and UK (25). It is important to note, however, that most key informants indicated that they only reported important CBIs that are implemented at a large scale in their country. This is also the case for the above-mentioned countries with the exception of Italy.

What are important determinants of initiating CBIs at a local level?

The CBI questionnaire contained a question about determinants of initiating the CBI at a local level, with a list of options. The CBI contact persons reported that childhood obesity being a priority issue in national policy as well as a high perceived need to take action are the most important contextual factors for the initiation of CBIs at a local level. This was mentioned as an important determinant by 77% of the 83 CBI respondents. Other important contextual factors were existing collaboration between relevant networks at a local level (53%) and enthusiastic key persons, for example, in local policy (47%) (Figure 1).

Figure 1. Contextual factors of importance for initiating CBIs at a local level (n= 83)



Furthermore, the possibility to connect to existing (local) policy initiatives was chosen by 37% of CBI respondents, and about one third of the respondents emphasised the importance of the availability of a best practice approach and/or significant attention for the prevention of obesity at a national level (mass media, TV). In addition to the pre-listed choices, respondents mentioned the following factors: an excellent coordination between the health and education administration, previous experiences with health promotion in schools, high mortality from diabetes and cardiovascular diseases and/or specific interests of stakeholders, for example physiotherapists.

3.2 Defining community-based initiatives against childhood obesity

KEY MESSAGES

- Out of 83 CBIs, 49 were executed at the city or neighbourhood level, 21 at the school level, and 13 at other levels. In 80% of the CBIs at the city level, the school was involved as the primary (n=21) or additional setting (n= 18).
- The target population consisted of children only in 64% of the CBIs whereas the other CBIs also targeted people older than 17 years of age (36%).
- In 70% of the CBIs, the children were involved in developing and/or implementing the CBIs. In 71% of the CBIs, the parents were involved in several roles.
- In 66% of the projects, the activities were implemented in more than one setting or in general throughout the neighbourhood.

Variety in included projects despite inclusion criteria

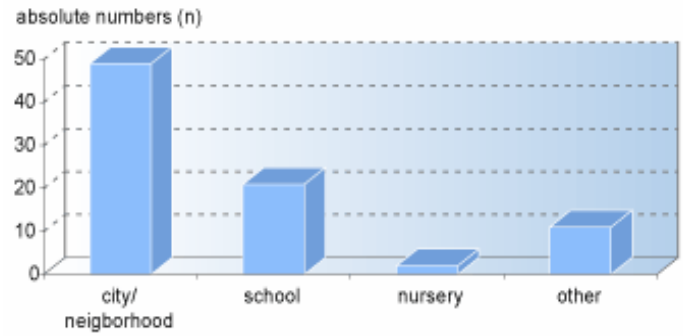
The methodology section described the inclusion criteria and annex 1 provides detailed information about these. As expected beforehand, compliance to the inclusion criteria can occur in several ways, resulting in a variety of approaches in the included projects. This is for example the case for the aspects 'involvement of target population' and 'intersectoral collaboration'. This chapter provides insight into the various ways in which the included projects meet the inclusion criteria, and hence can be considered a 'true' CBI against childhood obesity.

The level of execution

It became apparent during the survey that many professionals consider CBIs executed at the city or neighbourhood level as 'true' CBIs. However, school-based projects could also be eligible for inclusion if they fulfilled the criteria. For example, a school-based approach was eligible if there was collaboration with another local stakeholder or when more than one local policy mentioned the CBI in its policy document. The questionnaire asked for respondents to note the level of execution; stratified as city/neighbourhood level, school, nursery/kindergarten, or other types of local communities. Thereafter, questions followed on the number of locations to be able to assess the degree of implementation (see section 3.3).

Another part of the questionnaire included questions about the settings where CBI activities were organized. For CBIs implemented at a city/neighbourhood level (= level of execution) the main setting may well be the school. The difference with CBIs executed at the school level is that these latter CBIs consider the schools as the primary entry point, for example, to approach them with information about the CBI. Furthermore, schools can participate regardless of their geographical location, while CBIs executed at a neighbourhood level are restricted to a geographically defined area when developing their CBI and/or target the CBI activities. Figure 2 describes the number of CBIs according to the level of execution.

Figure 2. Level of execution of the community-based initiatives (n=83)



Most CBIs implemented at the 'other types of local community' levels were family-based approaches and/or CBIs originating from regular paediatric health care departments. In 80% of the CBIs at the city level, the school was involved as the primary (n=21) or additional setting (n= 18). So, most CBIs reported the city or neighbourhood level as their level of execution (n=49), but the school was the setting most often involved (in 71% of CBIs).

The next paragraphs provide more information on the aspects that make an intervention 'community-based', even when executed at a school level or other type of local level. First this is done for involvement of the children and their parents and thereafter for the intersectoral collaboration. Finally, more information is provided on the health objectives of the CBIs.

Involvement of children and their parents

The target population consisted of children only in 64% of the CBIs whereas the remaining CBIs (36%) also included people older than 17 years of age. The specific age range was unknown for 5 CBIs. The specific age range concerned children younger than 7 years for 6 CBIs, children younger than 13 years for 31 CBIs, children between 13 and 18 years for 4 CBIs and all children (0-18 years) for 16 CBIs. The other 21 CBIs reported a mixture of the

above mentioned age groups. In total, **70% of the CBIs reported that the children had been involved during the development and/or implementation of the CBI activities**. Table 2 shows the specific ways in which children were involved.

Table 2. Various ways in which the children were involved during the development and/or implementation of the project (n=58 CBIs)

They were informed about the intervention	17%
They gave advice to professional developers	9%
The were consulted regarding the main problem and solutions	21%
They provided resources and were rewarded for this	5%
They contributed to the development and implementation, but were not responsible	12%
They defined the problem and solutions together with professional developers	3%
They independently initiated actions and were in control of the intervention	3%
Other ways not described above	28%
Unknown	2%

Some examples that were mentioned in the 'other' category were that children distributed fruit at schools, were involved in focus groups or pilot projects, planned sports activities at schools or were consulted about on-going development.

The aim of this survey is to provide an overview of CBIs against childhood obesity, so the children should have been the ultimate target population in all included CBIs. However, the parents/caregivers can be considered as an important entry point to reach children and they appeared to be involved in the CBIs in distinct roles. In 51 CBIs educational meetings were provided for parents, in 16 CBIs the parents were providers of the intervention activities and in 19 CBIs parental skills were developed. **Overall, in 71% of the CBIs parents were involved in one or more of these roles.**

Out of the 25 CBIs in which the children were not involved during development and/or implementation of the CBI, a (network of) parents was involved during initiation and/or implementation of the project for four CBIs, in six CBIs parental skills were developed and in five CBIs intervention activities were (also) provided by peers/parents. Furthermore, in 12 CBIs the activities were targeted solely at children under the age of 13 years. It may be less feasible to involve such young children in the ways as described in table 2. Overall, for 8 CBIs no involvement of the target population (at least feasible with children of 12 years and older) and/or peers/parents was reported, so it appeared that these had not actually complied with this inclusion criterion (see annex 4 for an overview of eligibility for all included projects). These CBIs were included in the analyses nonetheless, since we did not check validity for inclusion with the CBI coordinators, and we therefore had to rely on their initial judgement regarding eligibility of their CBI.

Collaboration of different stakeholders

CBIs require collaboration of various stakeholders at a local level. In the survey we considered this criterion as fulfilled in cases where there was compliance to at least one of the following five situations:

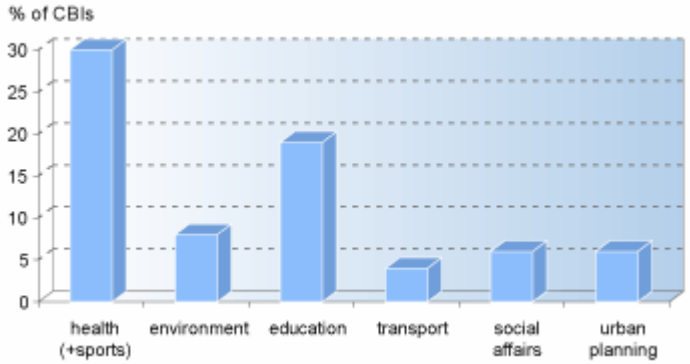
1) More than one policy area provides support at the local level
2) More than one local party is financing the CBI
3) More than one local party initiated and developed the CBI
4) Implementation in more than one setting and/or throughout the neighbourhood
5) The CBI concerns a diversity of activities in a geographically defined area

The various ways in which the 83 projects complied to these criteria are presented below.

1. Support of local policy areas: health the most frequent one, followed by education

In total, 33 CBIs reported local policy support, which required that the CBI (activities) is (are) at least mentioned in policy documents. Figure 3 shows the local policy areas that were involved. For 21 CBIs more than one local policy area was involved (25%).

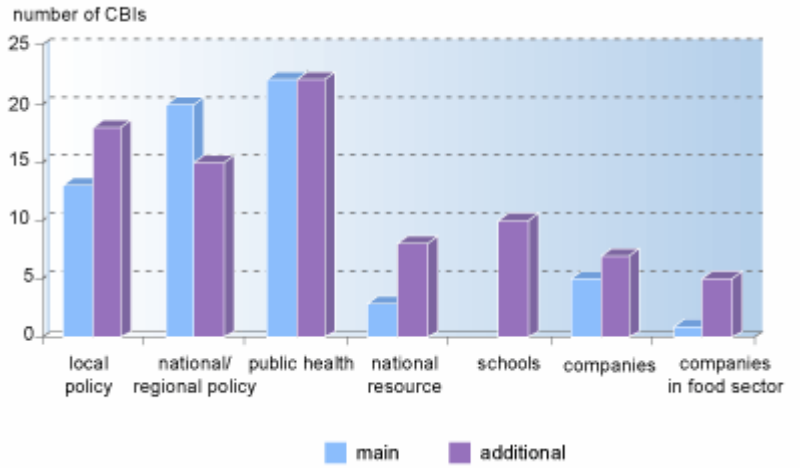
Figure 3. Local policy areas involved



2. Local parties involved in financial structure

In total, 22 CBIs indicated that one institute or organization was the funder of the CBI, 2 CBIs indicated that the number of funding organizations was unknown and 2 CBIs indicated that the CBI was developed and implemented without funding. Co-financing from a national source was provided for 46 CBIs (55%), and for 23 out of these this was the main source of funding. Herewith, **national resources were most often the main source of funding (n=23), but also (local) public health organizations (n=22) and local policy (n=17)** were often involved as the main funders. Schools and companies were involved as funders too, but in most cases as an additional party (Figure 4).

Figure 4. Funders of included CBIs (as main and additional funders)



Other (co)sponsors mentioned were for example European Commission funding (n=5) and health insurance companies (n=5). In total, 57 CBIs reported that more than one institute or organization participated in the funding of the project, and in 45 projects this included at least two stakeholders at a local level.

3. Local parties involved in development

In total, 72% of the CBIs reported that more than one local institute and/or organization was involved in initiating and/or developing the CBI at a local level.

4. Number of settings

In 66% of the CBIs the implementation of activities occurred in more than one setting or in general throughout the neighbourhood.

When analysing the four criteria mentioned above, it appeared that five CBIs did not fulfil any of them. However, four of these five CBIs reported a diversity of activities in a clearly defined geographical area, implying at least some form of collaboration or coordination between multiple stakeholders. So, out of 83 CBIs only one project did not clearly meet the criterion of intersectoral collaboration at a local level, which is coded in annex 4.

Health issues addressed in included CBIs

For 93% of the CBIs, obesity was the health issue that initially triggered the CBI. For 22% of CBIs this was cardiovascular disease, and for 12% this was diabetes prevention (multiple answers were allowed for this question). In 19% of the CBIs, other health issues were mentioned, such as alcohol consumption, mental and/or general well-being, and dental health. Overall, 92% of the CBI respondents indicated that their CBI specifically targeted nutrition, 88% physical activity, 52% body weight and 48% reported that other lifestyle factors were also targeted.

A combined focus on nutrition and physical activity may be the optimal way for preventing childhood obesity, and 84% of the CBIs indicated that this was the case and/or that the CBI specifically targeted body weight. Table 3 shows the specific aspects that were targeted for nutrition, physical activity and body weight. Section 3.4 describes the way this was done and the instruments and activities that are used within the CBIs.

Table 3. Specific issues of nutrition, physical activity and bodyweight that were addressed

Nutrition (n= 76) :	
Healthy diet in general	92%
Food intake patterns/rhythms	72%
Single food items linked to healthy diet in general (e.g. fruit)	72%
High caloric food items	62%
Other aspects	40%
Physical activity (n= 74) :	
Physical activity in general	97%
Walking	49%
Cycling	38%
Outdoor play	69%
Sports/exercise	64%
Cardiorespiratory fitness	29%
Strength / flexibility	25%
Watching TV	47%
Playing computer / video games (while sitting)	40%
Playing computer / video games (while being active)	22%
Other aspects	21%
Body weight (n= 43) :	
Energy balance	93%
(preventing) unhealthy slimming behaviour	40%
Psychological aspects (e.g. self esteem)	77%
(Preventing) stigmatizing of obese children (e.g. bullying)	54%
Improving coping skills, empowerment of children	61%
Other aspects	35%

3.3 Degree of implementation: number of children and costs

KEY MESSAGES

- For France, Hungary, Iceland, Spain and Sweden the included CBIs targeted at least 5% of the total youth population from 0-18.
- Counselling by health care professionals was executed in 44 CBIs and is the CBI activity that reached most European children: approximately 700,000. Approximately 275,000 children were reached by free provision of healthy foods.
- The level of funding was reported by 35 CBIs, with a median €200,000 per CBI and a total €32 million from 2005 and 2010.
- The cost per child was reported by 14 CBIs and varied from less than €1 to more than €300. The interpretation issues are described in the report.

As described in section 3.1, we identified 278 potentially eligible CBIs, representing about half of the total number of European CBIs implemented in this period. Our overview includes 83 CBIs, but among these are some important ones that are implemented on a large scale.

This section describes the degree of implementation and number of children reached from 2005 and 2011. First, we inventoried the geographical regions or cities and the size of the potential target population, as reported by the CBI respondents. This is especially relevant for CBIs executed at a city or neighbourhood level, since all children living in a particular town may then supposed to be under the influence of the CBI's actions. Thereafter we estimated the total number of children who were reached by specific activities for the included CBIs from 2005 and 2010. Finally, information is provided on the total budget that was invested and the reported costs per child.

Number of children in the target population

Annex 8 provides insight in the geographical regions and cities where the CBIs were implemented for each country, and the (potential) target population. Table 4 shows results for a selection of countries for which CBI data are available for the target population reached, and where these projects targeted at least 1% of the total youth population.

Table 4 Countries with CBIs that had a target population of at least 1% of the total youth population

Country	Project	Age range	N children reached	% of total youth population reached
Belgium	Viasano [a]	5-12	22,597	
	Zahnhygiene	5-8	2000	
	Youth care	6-18	50	
		Total youth population Belgium: 2,4 Million		**1%**
France	Aquitane region	3-18	10,000	
	ICAPS	11-12	475 [b]	
	EPODE [a]	5-12	973,386 [c]	
		Total youth population France: 15,3 Million		**6%**
Greece	Paideiatrofi [a]	0-12	63,364	
	Children study	10	1150	
		Total youth population Greece; 2,2 Million		**3%**
Hungary	Ecoschool	6-18	150,000	
	Happy	7-10	52,000	
	Go Healthy	3-6	100,000	
		Total youth population Hungary: 2,1 Million		**15%**
Iceland	Everything affects us	6-16	78% [d]	
	6H	6-16	45,000	
		Total youth population Iceland: 0,09 Million		**78%**
Netherlands	B slim	0-18	6650 [c]	
	Fam Lekkerbek	4-19	125	
	B fit	0-18	4550	
	Social activation	4-16	750	
	Samen gezond-Zwolle [a]	0-19	2525	
	Gezond gewicht-Utrecht	0-19	6500	
	Gezonde slagkracht	0-18	8000	
	Wijkgezond Zeist	0-18	500[c]	
	On the move	4-12	3500 [c]	
	Gezondheidsrace	0-18	4100	
	Lekker in je vel	8-12	40	
	Slagkracht	0-18	600	
	Raalte gezond	0-19	300	
	sCoolsport	6-12	2113	
		Total youth population Netherlands: 4,0 Million		**1%**
Romania	SETS [a]	0-12	30,000	
	Increase access	3-19	200,000	
		Total youth population Romania; 4,6 Million		**1%**
Spain	Move with us	6-12	120	
	Extremadura	5-14	5000[e]	
	Molina de Segura	1-16	14,000	
	Delta	6-16	58,900	
	Murcia	0-18	86,000	
	PAIDO	6-16	4500	
	Program dining	3-12	314,368	
	THAO [a]	0-12	14,500[b]	
	Moviprogram	9-13	600	

	POIBA	8-10	12,000	
	Com. health centers	6-14	134,723 (712 schools)[c]	
		Total youth population Spain: 9,1 Million		**7%**
Sweden	Family weight school	12-18	3600	
	Health equilibrium	0-18	40,000 [c]	
	Parental support	6	1200	
	Scip school	6-16	4500	
	Salut	0-18	54,000	
	Jönköping	0-18	80,000	
	Life in motion	1-15	72,000 [c]	
	Friska barn	1-5	2000	
		Total youth population Sweden: 2,2 Million:		**12%**

[a] EPODE derived approaches; [b] future expansion is foreseen; [c] estimated potential target population by RIVM team; [d] percentage provided by CBI respondent; [e] possibly more, when this number would apply to each city.

Table 4 shows that the included CBIs target at least 5% of the total youth population from 0 to18 years in France, Hungary, Iceland, Spain and Sweden. Since most CBIs target young children in particular, but not from 0 to 4 years, the percentage of the total population of children attending primary education is even larger than the percentages in table 4. As shown in the table, EPODE-derived CBIs are implemented on a large scale throughout Europe. The same accounts for several Hungarian, Icelandic, Spanish and Swedish projects, and some German and UK projects. Annex 8 presents detailed information for each CBI. For CBIs executed at the neighbourhood level, the target population (children 'under the influence' of CBI strategies) included all children living in the particular geographical area, and for school-based approaches the target population included every student. In addition, we collected information about the reach of specific activities implemented within CBIs.

Number of children reached by specific activities executed in the included CBIs

Counselling by health care professionals was performed in 44 CBIs, and reached most European children; an approximate total of 700,000. Approximately 600,000 children were reached through educational meetings for parents and 275,000 by free provision of healthy foods, as is shown in table 5. The first column of table 5 shows the total number of children reached by the activities as reported by the CBI respondents that executed a particular activity (the number of CBIs is shown in brackets). The second column presents the number of CBIs that indicated having executed this activity, but did not report the number of children reached. The last column presents an estimated range of children reached, combining the first two columns. The average number of children reached per CBI was calculated from the first column; using a conservative approach that omitted the CBI with the highest value. Thereafter, this average number of children reached per CBI was multiplied by the number of CBIs with an unknown reach (second column). The last column sums up the reported total number of children reached per CBI (first column) and the number of children reached per CBI estimated for the CBIs that executed the activity, but did not report the number of children reached.

Table 5. Number of children reached by specific activities of included CBIs

Activity	Reported total number children reached (n CBIs)	CBIs unknown[1]	Estimation total number children reached
Counselling children	253,272 (14)	30	643,000 - 793,000
Counselling parents	264,684 (20)	31	534,000 – 668,000
Cooking classes	132,033 (11)	18	240,000 – 348,000
Extra sport activities	49,789 (19)	22	93,800 – 107,000
School education	244,418 (16)	27	442,000 – 658,000
Free provision of food	150,110 (6)	7	220,100 – 325,110

[1] these CBIs reported that the specific activity had been performed, but the number of children reached was unknown;

As indicated before, childhood obesity is a health priority issue in all European countries and CBIs are accompanied by many other policy initiatives and activities. Hence, the above-mentioned range of children reached by specific activities is an underestimation, since these activities are also performed outside a CBI context; for example, as single strategies within national action plans. Furthermore, the included CBIs only represent about half of the total number of CBIs. Annex 9 presents the information for each CBI and the summary statistics for all activities. For all activities, most CBIs did not report the number of children reached. This gap in information is discussed as a quality indicator in section 3.5.

Amount of funding for included CBIs

Overall, 23 CBIs reported that their amount of funding was unknown, 25 CBIs were not allowed to mention the amount, and 35 CBIs reported the amount of funding. The total amount for the 35 CBIs was almost €32 million from 2005 to 2010. However, more than half of this amount is spent on the Food for Life Partnership project (UK) where €19,7 million came from a lotteries from 2005-2010. The median amount of funding was €200,000 per CBI.

The reported costs for executing the CBI

The questionnaire distinguished the amount of funding and the actual costs that have to be considered when a CBI is implemented at a new location. This was done for two reasons. First, the funding could also involve a budget for the development of materials and evaluation of the CBI and these funds may only be partially needed (or not needed at all) when implementing the CBI again at a new location. Second, it is of interest to have an estimation of the actual expenses per child or unit reached. One should note, however, that the exact costs and output are dependent on local conditions and may vary widely among neighbourhoods, even when using the same CBI protocol. This was mentioned in particular by CBIs implemented on a large scale. For example, in some cases parties within a public-private partnership may sponsor certain activities, while in other cases this needs to be paid

from the CBI's budget. Nonetheless, since CBI respondents emphasised the importance of sufficient funding (see section 3.7), it is of interest to provide details about the amounts that need to be considered. Information about costs was provided by 25 CBIs, and 17 CBIs reported the amount per child reached. Table 6 reflects this information, as well as the CBIs' activities. Table 6 only includes CBIs which reported a specific number of children reached for at least one of their activities in annex 9. For 14 CBIs, the cost per child reached varied from less than €1 to more than €300.

Interpretation issues around costs per child reached

From table 6 it is noteworthy that the expensive CBIs report a lesser number of children reached, while the actual activities do not seem to differ significantly. This illustrates the difficulty of interpreting these data. The reasons may be that the estimation of children reached is less precise among the less expensive projects or that a large scale of implementation is accompanied by lower costs per child reached. It is also plausible that the intensity of activities per child reached is higher for the expensive projects. We could not distinguish between individual and group visits in counselling programs and individual visits are rather costly compared to group visits.

Another issue for the intensity of CBI activities is that more intense activities are more costly, but on the other hand, they show a larger effect. Bogers *et al.* (9) investigated the costs and effects on the mean body weight of 80 lifestyle-counselling programs. The intervention costs were calculated in a standardized way. The results showed that higher intervention costs were accompanied by a larger weight loss after one year (7). This makes clear that **table 6 should not be interpreted as suggesting that less expensive CBIs are more 'cost effective'**. It is also important to note that effectiveness of CBIs can be enhanced by structural changes in the environment (instruments) at low costs, which will vary among projects. Finally, no standardised methodology was applied, for example whether to include costs of professionals (in many cases teachers) and the salary scales when this is done. Furthermore, variation may exist in the CBIs as compared to real life implementation. For example, initially healthy foods are donated for a project, but then must be paid for if continued, or people have to pay for extra sport activities themselves. It has been mentioned that increased fruit and vegetable consumption of children resulted in an economic return for the local community, which was not taken into account systematically.

Overall, table 6 provides an indication of the costs of CBIs. Policy makers will consider information about costs highly relevant, especially when considering wider implementation. However, most CBIs did not report this information and this is identified as a gap in information (see section 3.5). The necessity of a standardised methodology for calculating costs is strongly emphasized for the purpose of comparing (activities of) CBIs.

Costs per child reached	Project (Country)	Activities	Number of children reached
< 15 euro	Paideiatrophi (Greece)	Educational meetings for parents Leaflets or course materials *+ 7 activities with unknown reach*	100.000
	Fresh Fruit in Schools Project (Ireland)	Leaflets or course materials Free provision of healthy foods *+ 1 activity with unknown reach*	4000
	Participative project in Extremadura (Spain)	Extra sports activities Social activities Educ. at school ab. healthy lifestyle Free provision of healthy foods Orientation in supermarket Organized walking/cycling tours Guides showing walking/cycl. tours *+ 5 activities with unknown reach*	5000
	Five/60 (UK)	Educational meetings for parents Cooking classes Extra sports activities *+ 1 activity with unknown reach*	8000
15-50 euro	sCoolsport (Netherlands)	Extra sports activities Leaflets or course materials Educ. at school ab. healthy lifestyle *+ 2 activities with unknown reach*	2000
	Villa Vitality (UK)	Cooking classes Extra sports activities Leaflets or course materials	12.000
		Discussion meetings Educ. at school ab. healthy lifestyle	21.000
	BeActive After-School (Ireland)	Extra sports activities	1379
		Leaflets or course materials	4000
50-200 euro	Move with us: Exercise looks after you (Spain)	Counseling by health care profess. Educational meetings for parents Discussion meetings Social activities *+ 1 activity with unknown reach*	100
> 200 euro	MOVI Program (Spain)	Extra sports activities *+ 1 activity with unknown reach*	500
	NHS Dudley MEND (UK)	Counseling by health care profess. Educational meetings for parents Discussion meetings	200
		Orientation in supermarket	160
	Fun 4 Life (UK)	Discussion meetings Guides showing walking/cycl. tours Social activities Sports club Organized walking/cycling tours *+ 5 activities with unknown reach*	110
	Familjevikt-skolan (Sweden)	Counseling by health care profess. Educational meetings for parents Leaflets or course materials Discussion meetings	144
	Miges Balù (Switzerland)	Educational meetings for parents *+ 2 activities with unknown reach*	450
	Fun, Food and Fitness Project (UK)	Counseling by health care profess. Educational meetings for parents *+ 1 activity with unknown reach*	90

Table 6. Costs per child reached and specific activities

3.4 Instruments and activities used in CBIs

KEY MESSAGES

- The most frequently reported instruments were strategies targeting professional training (75% of the CBIs), actions for parents (65%), and actions targeting the social or physical environment (55% and 49%, respectively).
- The most frequently reported educational activities that directly targeted children were general educational information (89%), group education (88%), and counselling sessions (57%).
- The CBI activities are most often provided by health professionals in general (other than medical doctors only) and teachers.
- The vast majority of CBIs (93%) implemented a combination of instruments and activities, and four out of the remaining CBIs implemented at least three activities or instruments (but not combined).

A CBI consists of a combination of strategies that are implemented at a local level and target the (local) environment, community capacity and/or the individuals. These specific strategies are presented separately in this section of the report, and can be considered as potential 'elements' to be incorporated in on-going or future CBIs.

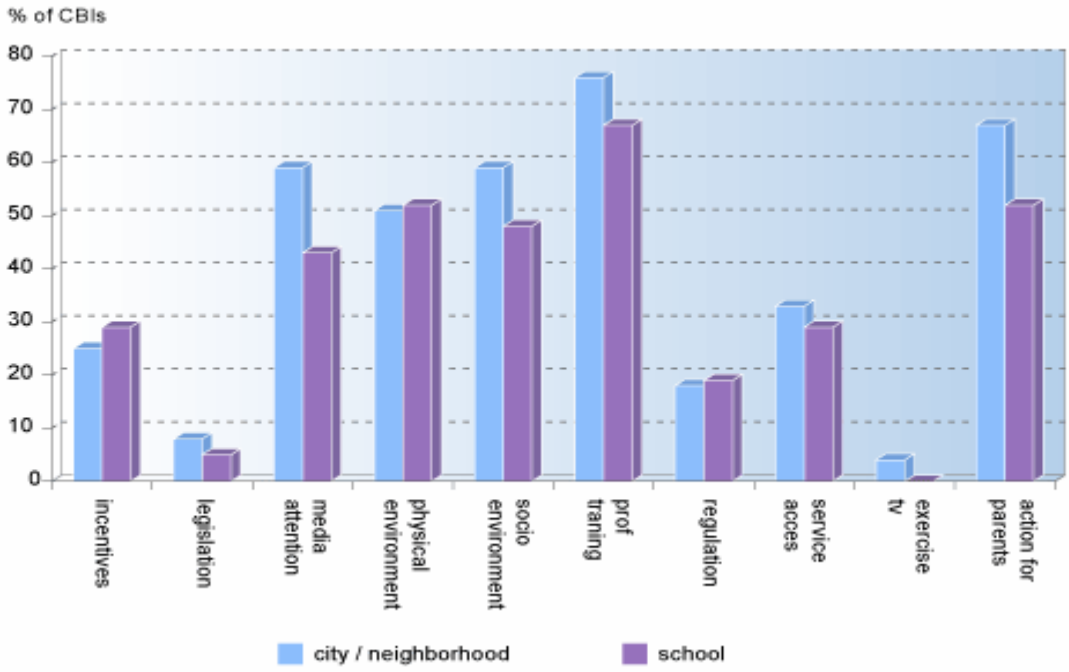
Generally, the **instruments** target the environment of the children (e.g. physical or social environment) while the **activities** are considered (educational) strategies that address child behaviour more directly. The children agree to become involved in the activity and/or are aware that they are engaged in the CBI activity.

Section 3.4 summarizes the contents of the 83 included CBIs for several instruments and activities. Subsequently providers of the activities, and specific subgroups that are targeted by the activities will be described, followed by information about the evaluation of CBI activities by the children. Finally, the comprehensiveness of the included CBIs will be illustrated.

Instruments applied in the included CBIs

The most frequently reported instruments were strategies targeting professional training (75%), actions for parents (65%), and actions targeting the social or physical environment (55% and 49%, respectively). The use of instruments did not differ substantially between CBIs executed at a city or neighbourhood level as compared to CBIs executed at a school level, which may be explained by the fact that in 80% of the city level CBIs the school was involved as one of the settings. At the neighbourhood level, the most frequently used instruments were professional training (76%), actions for parents (67%), actions targeted at the social or physical environment (59% and 51%, respectively), and media attention (59%). For CBIs at the school level, the ranking was professional training (67%), actions targeting parents (52%) and actions targeting the social or physical environment (48% and 52%, respectively). Figure 5 presents information for ten instruments stratified by level of execution.

Figure 5. Instruments applied in CBIs, stratified by level of execution



The CBI respondents reported additional information regarding the instruments used in their CBI, which is summarized below:

> **Professional training** refers to training of health professionals, teachers or other providers of intervention activities;

Example professional training – Lebenslust (Germany)

During the project the kindergarten teachers' interest has increased, the project's topics have become more aware to them, so they started to care more for their own as well as their children's eating habits... Moreover, kindergarten teachers' confidence in their possibilities to influence the children's eating habits has increased during the project…

> The instruments **targeting parents** refer to educational meetings for parents, skill development practices (e.g. cooking healthy, learning skills to read food labels); knowledge (e.g. phone counselling connected to family insights about obesity), access to care facilities;

Example skill development of parents – Parental support (Sweden)

The parents were offered two sessions of motivational interviewing. Each session lasted 45 minutes where the parents discussed issues related to diet, physical activity and sleep with a trained health educator..

> The instruments **targeting media attention** refer to articles in local media, newspapers, mass media (e.g. TV and radio), public campaigns, flyers, in some cases congresses or organising a district / local health day, or provision of general information to raise awareness (e.g. leaflets);

> The instruments **targeting social environment** refer to the involvement of churches, professors, parents and social actors in creating (new) social networks to stimulate a healthier environment for children (e.g. folk festivals) or provision of social support or funds to stimulate relevant activities as proposed by community members;

> The instruments **targeting physical environment** refer to the availability of safety and healthier options for public transportation (e.g. biking lines, walking routes), healthy products in kindergarten, school canteen, improved schoolyards and playgrounds facilities, construction of safe routes for promoting active commuting to school, or free provision of healthy foods;

> The **incentives** involve for example a discount on participation in sports or on healthy food;

> The instruments targeting **service access** refer to providing more or improved access to sports or leisure time activities;

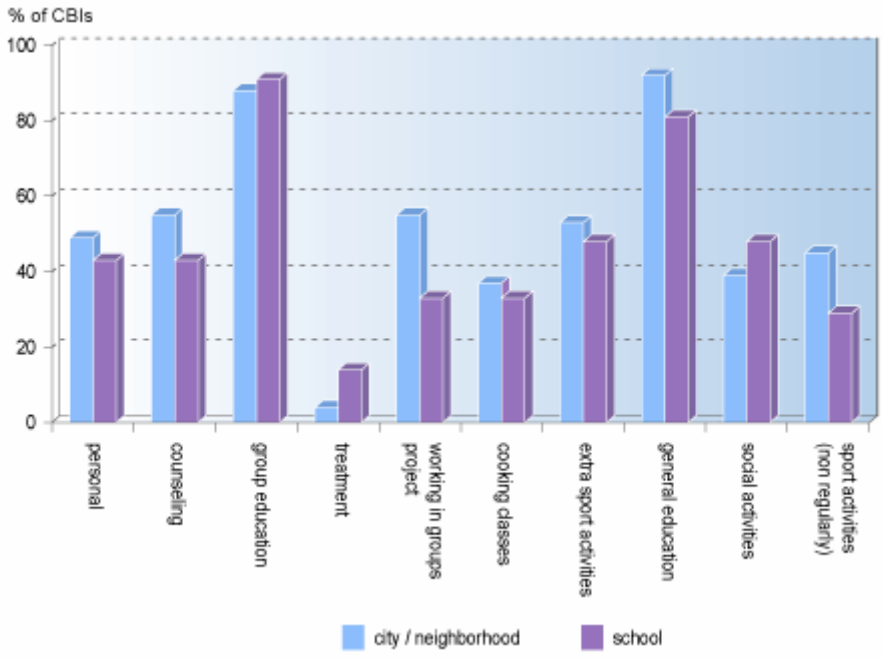
> The instruments involving **regulation** concern for example agreements between organizations involved, or changes in the specific rules about school provided meals and in case of **legislation** this is formalized in law;

> Finally, **exercise TV** could be for example a TV-guided aerobic program.

Activities used in included CBIs

The most frequently reported educational activities, directly targeting the children, were general educational information (89%), group education (88%), and counselling sessions (57%). Just as for the instruments, a similar pattern was seen for CBIs activities executed at the city or neighbourhood level as CBIs executed at the school level (figure 6). The figure shows that all activities, except treatment, were organized in at least a third of the CBIs.

Figure 6. Activities applied in CBIs, stratified by level of execution



Additional information regarding the activities in the CBIs is summarized below:

> Providing **general educational information** consisted of:

- Distributing leaflets or recipes as applied in 70% of all CBIs;
- Discussion meetings about healthy lifestyle as applied in 57% of all CBIs;
- Providing guides for walking or cycling tours as applied in 13% of all CBIs;
- A guided orientation tour in a supermarket as applied in 19% of all CBIs.

> **Group education** consisted of education about a healthy lifestyle during group sessions, mostly classroom-based;

> **Personal advice** consisted of individualised and tailored advices regarding a healthy lifestyle, while **Counselling sessions** referred to counselling/ therapy, which is on a longer term and more intensive and profound than personal advice;

> **Working in groups on a project** were activities where children prepared a presentation or performed another task together, related to the topic of healthy lifestyle;
> **Social activities** concerned games or seminar(s), (partly) on healthy lifestyle;

Example social activities and working in groups

- *Delta project (Spain)*: Educational workshops for schools, children's theatertheatre, puppetry, storytelling, educational games (some of his own design), health fairs and youth meetings.

- *HAPPY (Hungary)*: Several funny group activities were offered for children, for example poster contest, flash mob, sport competitions, etc.

> **Extra sports activities** consisted of sport activities for children organised by the school and/or at school; > **Sports activities** in general concerned sports, walking or cycling activities in groups or offered on an individual basis.

> **Cooking classes** considered courses about healthy cooking and learning skills to do that;

> **Treatment** was applied within medical therapy programmes and could involve prescription of drugs;

In addition to the pre-listed options described above, CBI respondents could report ‘other options’ of which two examples are presented in the text box on the next page.

Example "'other"'

– *Viasano (Belgium).* Viasano stands in towns events targeting families (sports fairs, neighborhoodsneighbourhoods celebrations, children day...), actions targeting city hall employees (exhibitions in the city hall, diabetes screening, fruit distribution...)

- *Mend (United Kingdom):* 'many more'.

Providers of CBI activities

Table 7 shows that **health professionals in general (other than medical doctors) and teachers are the providers most often involved**. The data in the table are given in percentages. For example, when 51 CBIs executed educational meetings for parents and in 13 cases this was done by a community worker, the table shows 26 (%).

Table 7. Providers of CBI activities (% of the CBIs in which specific activity was offered)

Activities	Number of CBIs offering activity	Provider					
		Community worker	Medical doctor	Health profess. *	Peer	Teacher	Internet
		% of CBIs in which activity was offered					
Educational meetings for parents	51	26	22	63	10	26	10
Cooking classes	29	24	3	52	10	45	3
Extra sport activities	39	28	5	18	10	56	0
Discussion meetings	47	30	17	64	9	34	6
Education at school about healthy lifestyle	47	13	17	49	8	75	6
Orientation in supermarket	16	31	13	75	0	19	0
Social activities	34	35	15	44	12	35	9
Organized walking or cycling tours	14	36	7	21	0	50	0

* Not including medical doctors

The activities are provided by peers in about 10% of the cases. Although medical doctors are involved primarily in educational meetings for parents, this activity is most often done by another type of health professionals (22% versus 63%, respectively). Other types of providers were psychologists (in 18% of the CBIs performing educational meetings for parents) and sport consultants/trainers, especially for the extra sport activities (23%).

Specific subgroups targeted by CBI activities

Overall, in 26% (education at school about healthy lifestyle) to 66% (counselling by health care professionals) of the CBIs, the activity was targeted at specific subgroups. In more than half of the cases this concerned overweight or obese children, as is shown in table 8.

Table 8. Number of CBIs providing activities for specific subgroups

Activities	Number of CBIs offering activity	Number of CBIs offering activity targeted at specific subgroups	Number of CBIs offering activity targeted at socially deprived children	Number of CBIs offering activity targeted at overweight children
Counseling by health care professionals	44	29	8	21
Educational meetings for parents	51	26	7	17
Cooking classes	29	11	5	7
Extra sport activities	39	18	9	12
Discussion meetings	47	22	6	16
Education at school about healthy lifestyle	47	12	6	5
Orientation in supermarket	16	9	3	6
Social activities	34	16	6	7
Organized walking or cycling tours	14	4	2	2

Evaluation of CBI activities by the children

Additional questions for each activity included whether the activity was positively or negatively evaluated by the children or by the parents/caregivers. Table 9 shows this information for the activities.

Table 9. The outcome of evaluation of CBI activities by the children

Activities	Number of CBIs offering activity	Number of CBIs in which activity was positively evaluated	Number of CBIs in which activity was negatively evaluated*
Counseling by health care professionals	44	15	12
Educational meetings for parents	51	30	5
Cooking classes	29	18	2
Extra sport activities	39	22	6
Discussion meetings	47	25	3
Education at school about healthy lifestyle	47	24	3
Orientation in supermarket	16	7	2
Social activities	34	20	3
Organized walking or cycling tours	14	6	3

* Also including CBIs in which outcome evaluation was partly positive

It is noteworthy that the children in a relatively large number of CBIs evaluated the activity as not or only partially positive for counselling by health care professionals, organized walking tours and extra sports activities. The background, context or reasons for this is not entirely clear from the questionnaire. However, for the 'lessons learned' question, some CBIs:

- stress the importance of skilled and capable providers;
- mention that working with migrant children is difficult;
- stress that physical activity in general should be emphasised (instead of sport);
- emphasise that the whole school team should be committed to the CBI and that co-operation with parents is necessary;
- acknowledge that the CBI needs further development or that the process just takes time.

The activities that were frequently evaluated in a positive way by the children were cooking classes and discussion meetings.

Comprehensiveness of included CBIs

The included CBIs are comprehensive projects involving multiple strategies at a local level. The vast majority of included CBIs executed a combination of instruments and activities (93%). Five CBIs reported no instruments, but two out of these executed at least three types of activities. One CBI reported no activity, but implemented three instruments. So, three out of the remaining six CBIs implemented at least three activities or instruments (but not combined). **Almost half of the projects (n=40) involved a public-private partnership** and the partners were schools, public health organizations, local policy institutes, companies and the commercial sector. In total, **61 CBIs collaborated with the health care sector**, and in 41 of them, this included medical doctors.

3.5 Quality indicators

KEY MESSAGES

- Regarding **quality of documentation**, 78% of the CBIs indicated that a primary source document is present, 57% of the respondents indicated that a process evaluation was performed, while 38% stated that it was planned for the future, and all respondents were able to report on the instruments and activities applied in the CBIs
- Regarding the **theoretical foundation**, 82% of the CBIs reported having a specific goal for nutrition, physical activity or body weight, 64% indicated that theoretical models had been used to develop the CBI, and 36% provided a reference according to the theoretical foundation and/or previous evidence.
- Information regarding the **costs** of the CBI and the number of **children reached by specific activities** were the least frequently reported quality indicators (reported in about 20-30% and 45% of the CBIs, respectively).
- It is a sign of quality when a **transfer system** exists, as was the case for 61% of CBIs. To ensure **sustainability**, CBI activities can be incorporated in usual clinical routines or policy documents, as was the case for 16% and 41% of CBIs respectively.

This section describes the quality of the CBIs according to criteria as used in the quality model described by Brug *et al.* (10). In short, this model distinguishes the following levels:

- Quality of documentation
- Theoretically sound
- Probable or established effectiveness

Ultimately, a 'best practice approach' can be identified when effectiveness is proven, which is the highest level of quality, but such a CBI would also need to comply with the quality indicators of the lower levels. The usual procedure at the RIVM centre for a Healthy Living, where this model is applied, is to have an expert commission verify the criteria based on extensive project information, as provided by the intervention owners. In this report, however, we had to rely on the answers given in the questionnaire and did not verify to what extent the criteria were actually met. Annex 10 lists information for all CBIs about quality indicators, based on the survey questionnaire and section 3.6 discusses reported effectiveness.

This section presents the percentage of included CBIs that comply with the quality indicators related to quality of documentation and the theoretical basis.

Quality of documentation

An intervention is 'well documented' when it is well described, has a good manual and includes a process evaluation. The following quality indicators are discussed below:

1) Availability of primary source document
2) Performance of a process evaluation
3) Availability of information on CBI content (instruments and activities)

1. Primary source document and presence of logo/slogan

In total, 78% of the CBIs indicated that a primary source document is present, 9% that it is not present and in 13% of the CBIs it was unknown. For 48 CBIs a reference was provided or a website where people can find the primary source document. The name of the author of the document was reported by 36 CBIs (67% of cases where primary source document is present) and a website was reported by 37 CBIs (69% of cases). For 19 CBIs the information is available in English. Another important issue is whether the CBI has a specific logo or slogan, which makes individual activities recognisable as belonging to a holistic approach; 80% of the CBIs reported that a logo and/or slogan is being used.

2. Process evaluation

In total, 57% of the respondents indicated that a process evaluation was performed, 38% stated that it was planned for the future, and 6% did not include a process evaluation (n=4). However, one of these four projects reported information on the reach of intervention activities, so at least this type of process evaluation was performed to some extent. The other three projects are coded as not including a process evaluation in annex 4, since this was one of the inclusion criteria. The most frequently reported topics addressed in the process evaluations were 'comparing real practice implementation of (planned) activities to the protocol' and 'barriers and promoting factors for (further) implementation' (table 10).

Table 10 Topics addressed in process evaluations	% of CBIs[1]
Real practice implementation of (planned) activities compared to the protocol	62%
Barriers and promoting factors for (further) implementation	62%
Reach of intervention activities among the children	59%
Reach of intervention activities among intermediary parties (providers)	22%
Satisfaction with activities among children in the target group	49%
Satisfaction with activities among the children's parents/caregivers	52%
Satisfaction with activities among stakeholders/providers/intermediary parties	49%
Other	14%

[1] Out of 61 CBIs that reported a process evaluation and its contents

Other topics mentioned as areas of interest in the process evaluation included issues such as the percentage of schools that fulfilled the criteria for a 'health promoting school', aspects of intersectoral collaboration (support of professionals for working on a healthy lifestyle, health-embedded policy, participation and consistency of activities), evaluation of the menus, and evaluating the factors that had been identified as critical success factors in the strategy map when developing the CBI (or crucial factors for attaining the objectives of the CBI). Furthermore, several health and behavioural outcomes were mentioned for process evaluations, which are discussed in more detail in section 3.6. In 46% of the CBIs, a reference to a report and/or website was provided.

3. Content of CBI

The questionnaire asked about the content of the CBI using a pre-structured list of instruments and activities, as presented in section 3.4. All CBI respondents indicated in this list the instruments and activities that were applied within the CBI. For 14 CBIs it was sometimes indicated to be unknown whether a specific activity was part of the CBI (see annex 9; the double question marks) but generally we can conclude that information on the content of the CBI was well reported.

Theoretical foundation

According to the quality model, an intervention can be evaluated as 'theoretically sound' when the end and intermediary goals are made explicit, the target population is clearly defined, the methodology and activities are described in detail, and the support system is clear. Furthermore, a clear theoretical basis should be present and preferably also published evidence that underpins the CBI, as well as the actions that are performed. Finally, the intervention should be transferable and information should be available about the costs. The following issues will be discussed in this paragraph:

1) Defining goals of the CBI
2) Additional information on CBI content
3) Support system / funding
4) Presence theoretical basis / existing evidence
5) Costs of the CBI
6) Future continuation / sustainability
7) Transferability

1. Goals of the CBI

Overall, 64% of CBI respondents indicated a specific goal for nutrition, 57% for physical activity and 38% for changing body weight (multiple answers possible). In an optional question we asked for further information and in most cases it appeared that the goal was to comply with general guidelines for a healthy diet and/or physical activity. An example was to

establish a daily period of physical activity of 30-60 minutes, which in some cases was made more explicit by determining a percentage of the target group ('all children are physically active at least 60 min/day or a 10% increase in the number of children with an appropriate level of physical activity'). For nutrition, most goals were in line with general recommendations; for example more fish, fruit and vegetables, water, and preferably all-grain bread, or less sweets and fat. Other goals targeted the environment ('more healthy menus in the centres') or determinants of behaviour ('increase awareness of importance of healthy lifestyle and balanced diet'). In total, 82% of the CBIs reported having a specific goal for nutrition, physical activity, body weight assessed.

2. Number of children reached by specific CBI activities

The reach for most of the activities was reported in about 45% of the CBIs. For organized walking tours the reach was known for 29% of the CBIs who executed this activity and for social activities the reach was known for 53% of the CBIs. Overall, 59% of the CBIs reported the number of children reached for any of their activities, and 10 CBIs did for all activities.

3. Support system and funding

Only two CBI respondents did not know how many institutes/organisations took part in the funding scheme. 43% of respondents reported the amount of funding, 25% reported to be familiar with this amount, but did not report the exact amount, and 32% of the respondents did not know the figure.

4. Theoretical basis and previous evidence according to effectiveness

Overall, 64% of the CBI respondents indicated that theoretical models had been used to develop the CBI, and 48% (75% of the CBIs reporting a theoretical basis) indicated that the appropriateness of this theory with regard to the intervention goals and target group was supported by scientific evidence. Further, 30% of CBIs confirmed that evidence was present based on comparable CBIs and provided a reference. In total, 36% provided a reference according to the theoretical foundation and/or previous evidence. Annex 11 provides a list of references that were cited and hence provides an overview of relevant literature.

5. Costs of the CBI

As was described in section 3.3, information about costs of the CBI (activities) is interpretable only when the broader context and methodology of costs calculation is carefully considered. Still it is a sign of quality when this information is available. Information about costs was provided by 31% of the CBIs, and 20% reported the amount per child reached.

6. Sustainability

It is of importance to aim at achieving sustained activities to optimise the chances for long-lasting beneficial effects. The questionnaire asked about the extent to which CBI activities are

incorporated within policy documents and/or usual routines of (medical) organizations. In total, 41% of the CBIs indicated that the sustainability of the CBI activities (beyond the originally planned period) was incorporated in policy documents, and for 30% of the CBIs, this was accompanied by financial resources. Furthermore, 40% of the CBIs indicated that future continuation was not yet a part of national/regional policies, but that it might be the case in the future. For 16% of the CBIs the intervention activities were part of regular medical guidelines, which is also a manner of ensuring sustainability, and 28% indicated that this was not yet the case, but might be so in the future. Finally, for 40% of the CBIs the activities were incorporated in the usual procedures of other relevant organisations. This primarily concerned schools policies or the incorporation of activities in the school curriculum.

7. Transferability

Almost all CBI respondents indicated that their CBI could be transferred to other locations both nationally, as well as internationally. Practical recommendations and remarks are summarised in the section 3.7. It is a sign of quality when a transfer system exists, which was the case for 61% of the CBIs, and it is also of importance to know whether special training is required for professionals before implementing the CBI activities; 86% reported that indeed this is required.

Annex 10 provides an overview of selected quality indicators for each CBI. However, as stated before, this should be considered as a first impression since we did not check the reported information in the questionnaire to verify accurateness or quality.

3.6 Effectiveness of included CBIs

KEY MESSAGES

- In total, 22 CBIs reported data on study design characteristics and the effectiveness of the CBI as a whole.
- The prevalence of overweight can reduce from 0% to 6% over time (based on seven CBIs), and mean BMI can be reduced among overweight children from 0,3 to 1,2 kg/m^2 in the short-term (based on three CBIs that specifically targeted overweight children).
- Effects on dietary intake and physical activity were heterogeneously reported and include fruit intake, sweets and beverages, sedentary behaviour and vigorous activity.
- It is difficult to compare and/or highlight results due to heterogeneous outcomes and the large variation in the quality of study designs.

In the quality model that was introduced in section 3.5, effectiveness is an important criterion. The model distinguishes two levels of effectiveness, namely probable and established, which is determined on the basis of the number of other studies available to underpin effectiveness and the quality of the study design. In the present report we don't make a distinction between the levels of effectiveness, since that would require literature research into effectiveness of similar projects and this activity went beyond the scope of the survey. Instead, we summarize the effectiveness as reported by the CBI coordinators.

Out of 83 CBIs, 69% reported effects of their CBI on body weight, physical activity and/or dietary intake. Significant effects (which can be either positive or negative) were reported by 22 CBIs for body weight, by 24 CBIs for the children's eating habits, by 21 CBIs for physical activity and by 15 CBI for the determinants of behaviour, such as knowledge or attitude. The number of CBIs that reported that their CBI did NOT have a significant effect on these outcomes ranged between four and eight. For the other CBIs it was unknown whether their CBI achieved significant effects. Out of the 69% reporting an effect, 39% reported that their study design involved a comparison with another region, and 37% CBIs (not necessarily the same) reported that the whole target population was measured several times.

Reported effects on body weight or prevalence of overweight

For summarizing the reported effects we compiled a table containing information on – among other issues - the size of the study population, the length of follow-up between measurements, and the actual effects. This table is shown in annex 12. To obtain the information for annex 12 all CBIs were approached separately by email to obtain additional information. Ultimately, complete data were obtained for 22 projects.

Two CBIs implemented at a neighbourhood level (EPODE, ICAPS) and two CBIs executed at a school level (Children Study, Movi program) reported favourable differences between the intervention and a control region for the mean BMI and/or prevalence of overweight, but one of them did this only cross-sectionally (EPODE). In addition, three CBIs implemented at a neighbourhood level showed decreased or stabilized rates of overweight prevalence within their study populations (Jönköping County, GO-Overvecht, B-Slim). Table 11a shows the reported effects of seven CBIs, stratified by the children's age categories.

Table 11a. Reported effects on body weight and prevalence of overweight

CBI	Age (years)	Reported Effect
EPODE (Ensemble Prévenons l'Obesité des Enfants) [1 2]	5-12	Difference in BMI [3]: 0.7 kg/m^2
		Prevalence overweight: 8.8% versus 17.8% in 2004
ICAPS (Intervention Centered on Adolescents' Physical activity and Sedentary behaviour) [1 2]	12	Difference in BMI [3]: 0.3 kg/m^2 after 4 years (p=0,05)
		Prevalence overweight after 4 years: 4.2% versus 9.8% among initially non-overweight adolescents
Jönköping County [2]		Prevalence overweight (obesity) in '04/05, '06/07,'09/10
	4	12% (2%) - 12% (2%) – 12% (2%)
	6,5	14% (5%) - 12% (4%) – 15% (5%)
	10,5	17% (4%) – 17% (3%) – 17% (4%)
	14	15% (3%) – 14% (3%) – 17% (5%)
	16,5	15% (4%) – 15% (3%) – 13% (4%)
GO-Overvecht [2]	4-12	Prevalence overweight: 26% ('04-05) to 20% ('08-09)
B slim [2]	5-6	Prevalence overweight: stabilized since 2006
Movi [1]	8-10	Prevalence overweight after 2 years:
		Girls: intervention 32% to 26%; control 29% to 27%
		Boys: intervention 30% to 28%; control 33% to 32%
Children Study [1]	10	BMI Z score: control +0.1; intervention -1.1;

[1] Study design involving comparison with a control region/condition; [2] CBI executed at the city/neighbourhood level; [3] BMI=Body Mass Index; WC waist circumference.

Overall, prevalence rates of overweight within a general population of children decreased between 0% and 6% over time (GO-Overvecht). For Jönköping County an initial decrease

after 2 to 3 years seemed to be followed by rising rates thereafter. It is noteworthy that the ICAPS intervention indicated a positive impact especially among NON-overweight adolescents at baseline. This suggests that generic approaches may be effective in preventing weight gain, but not in reducing body weight among overweight children, per se. Three CBIs in our survey reported intervention effects specifically among overweight or obese children. They reported positive short-term effects in the magnitude of 0,3 to 1,2 kg/m^2 (BMI) and 1 to 5 cm (waist circumference), as shown in table 11b.

Table 11b. Reported effects on body weight in overweight or obese children

CBI	Age (years)	Reported Effect
Integrated Obesity Care Pathway	7-17	Change in BMI[2] after 1 year: -0,9 kg/m^2
Alive 'N' kicking		Changes after 12 weeks:
	4-6	Change in BMI: -0,8 kg/m^2 ; WC[2]: -2.7 cm
	7-11	Change in BMI: -0,6 kg/m^2 ; WC: -2.0 cm
	12-15	Change in BMI: -0,3 kg/m^2 ; WC: -5.4 cm
MEND [1]	10	Change in BMI after 6 months: -1,2 kg/m^2

[1] Study design involving comparison with a control condition; [2] BMI=Body Mass Index; WC=waist circumference:

One should note, however, that the number of children involved in these studies was small, indicating a sub-optimal quality of study design. Furthermore, results are reported only for children who stayed in the programme and only one study compared the intervention with a control condition (MEND).

Reported effects on dietary behaviour and physical activity

Table 11c presents the magnitude of effects on outcomes related to dietary behaviour and physical activity. The table is meant primarily for illustrating the diversity of outcomes, since effects as reported by previous CBIs can be inspiring for formulating specific goals of future CBIs. In addition to the table, also effects on memberships of sports clubs, general well being and determinants of behaviour and knowledge were reported. For example, the project 'integrated obesity care pathway' reported improved global self-worth among the children.

Table 11c. Reported effects on dietary behaviour and physical activity

CBI	Reported effect
	Dietary behaviour
Aquitane	Fewer morning snacks at schools, as reported by teachers (69% to 58%); Fewer snacks in lunch boxes (34% to 19%)
GO-Overvecht	Increased eating of breakfast, increased fruit intake, fewer sweets
Villa Vitality	Fruit intake every day: increased 2% to 57%
B slim	Sugar drinks: decreased 89% to 48%
Lebenslust	Knowledge increased about healthy foods
Children Study	Sweets /beverages: control +0,2; intervention -0,8;
	Physical activity
ICAPS	Sedentary behaviour: control 27% to 36%, intervention 34% to 28%
Copenhagen school child study	Change in VO2-max during 7 years, small or non existent effects on several parameters after 3 years (including physical activity)
Be active after school program	No vigorous activity: 20% to 17% (as reported by parents)
On the move	At least 2 times a week sport at a club: 80% to 83%
Friska barn	Outdoor playing doubled
B slim	Physical activity in general: increase 44% to 72%

Interpretation issues around reported effects and quality of research

It is difficult to compare and/or highlight results due to heterogeneous outcomes and large variation in the quality of the study designs. The following methodological weaknesses in quality were identified among the various CBI reports: small and non-random samples, self-reported data, large dropout rates, and limited follow-up evaluation. Furthermore, CBIs reporting positive effects are probably overrepresented in the tables, so the effects should not be considered as being applicable for all CBIs. S CBI designs allow for adaptations to a specific local situation, the effectiveness of previous CBIs can never be assumed to be duplicated, even when using the same protocol. Still, insight is important since high-quality monitoring (such as performed in Jönköping Country) provides insight into the population-based impact of CBI implementation. Since high-quality monitoring/evaluation in a general youth population to assess population-based impact is available for only a few CBIs, this is identified as a clear gap in information.

What makes a CBI effective?

As seen in annex 12, CBIs that reported effectiveness had comprehensive approaches involving professional training, a focus on the physical and social environment, an education for children (e.g. group education and education about healthy lifestyles) and targeted the skills and knowledge of parents. No specific pattern of the instruments and activities was identified as associated with ‘effective’ interventions, and to identify a pattern would require

research beyond the scope of the present survey. Annex 8 presents the references that were cited as evidence for effectiveness of previous interventions. This list has not been checked, categorized or cleaned.

Two CBIs found smaller or no effects among overweight/obese children as compared to healthy weight children at baseline (ICAPS, Copenhagen school child study), suggesting that additional or more intensive intervention is required for weight reduction instead of preventing weight gain in a general population of children.

Further research is needed on the effects of specific intervention activities

Table 11a shows that seven CBIs reported results on body weight or prevalence of overweight in a general population of children. As stated above, evidence suggests that in addition to 'generic approaches', specific intervention activities are needed that target overweight children. Ideally, a CBI should include a 'high-risk strategy', which was the case for at least 21 of the included CBIs in our survey (see table 8).

More evidence is needed, however, regarding the long-term effects of weight management programmes for children. Another gap in information is information on the effects of specific intervention activities that are clearly designed for a specific age category with well-defined objectives, and which could be incorporated in future or on-going CBIs.

Regarding the effectiveness of specific intervention activities, more information is available then presented in the report, and the present survey could serve as a basis for further investigation. In the CBI questionnaire, a distinction was made between the established effectiveness of CBIs as a whole versus the established effectiveness of specific activities performed as part of the CBI. Overall, 39% of the CBIs reported that effectiveness was assessed for specific intervention activities performed as part of the CBI; 46% reported that this was not the case and for 17% this was unknown.

3.7 Practical experiences

The practical experiences summarized below are based on open questions in the questionnaire about lessons learned, barriers and promoting factors and estimated transferability of the CBI. First, this section describes the lessons learned in general, thereafter issues of transferability and finally remarks are summarized related to the actual content of intervention activities (e.g. specific issues that should be addressed).

Lessons learned

A key factor for success mentioned by many CBIs is a strong intersectoral collaboration and close involvement of a broad range of relevant stakeholders. Public-private partnerships were considered significant for this, although some CBIs reported difficulties getting commercial parties on board. Practical recommendations offered by respondents included trying to connect existing community initiatives and avoiding competition among various organizations. Several CBIs mentioned that developing a CBI takes time and that adequate referrals between organizations should be ensured.

QUOTE of CBI respondent:

`Pilot projects are important to prove the concept. Key for success is education together with free availability of healthy choice. In collaboration with industry a signed agreement with a set of clear rules is necessary.´

Involving the target group in the development and testing of the intervention was frequently mentioned as an important element contributing to the success of the CBIs. The staff that will play a role in the execution of the CBI should also be involved in this. Projects warned that others should be aware that involving target groups and staff is something that truly requires adequate attention; it should not be treated as a 'quick fix'. One project mentioned that they specifically had good experiences with involving key persons from the community when preparing communication materials. Another project found that involving front-line professionals in the development and testing of the intervention was a facilitating factor. In addition to the importance of a bottom-up approach, the importance of top-down support from the policy level was emphasised by several projects.

Parental involvement was mentioned by several CBIs as a key factor for success, though this is not always easy to achieve. Parents were reported by some projects as having unrealistic perceptions of their children's weight and this was an important reason for low participation rates. According to one project, the parents of those children who could benefit most from the intervention were the most difficult to reach. Annual measurements were recommended as an

incentive to keep parents motivated and involved. Motivating target groups to start with the intervention, as well as to adhere to it, was mentioned as a major challenge several times. Therefore, projects recommended setting realistic short-term goals. In order to motivate the participants, it was recommended that the duration of the intervention should be long enough to allow for sustained behavioural changes and actual weight loss. Certificates and cookbooks were mentioned as a good incentive for student participation.

QUOTE of CBI respondent:

'A high proportion of overweight children living within an area will not automatically mean a high number of referrals into your intervention.'

Broad support from the schools involved including all teaching staff was also frequently mentioned as a crucial factor. In practice it appears difficult for teachers to make the necessary time available for a programme, so this should be given explicit attention in a CBI; sufficient time should be made available in the classes' schedule. Teachers should be adequately supported by external resources, e.g. educational materials or instruction sessions. One project reported that teachers specifically valued the workshops given to them by dieticians. With regard to programmes that are aimed at making schools' meals healthier, several experiences were reported by the projects. Some emphasised the need to inform teachers and parents prior to the changes, as otherwise the children could react negatively to their changed meals. Other CBIs reported reluctance on the part of the parents, whereas the children had a more positive attitude.

With regard to the organizational aspects of the CBI, projects reported that it is necessary to have good staff with an appropriate background and adequate skills. Specifically, the necessity of a highly skilled and enthusiastic programme coordinator was mentioned by several projects. The availability of high quality materials (e.g. instruction materials, working spaces) was also mentioned as an important factor contributing to the success of CBIs. One project warned others to be aware of the vulnerability of using volunteers; another mentioned that the use of older siblings as translators should be avoided. Many projects emphasised the importance of funding; this should be dedicated, sustainable, adequate to cover all CBI-related costs in all sectors involved, and administratively organised in a simple way (e.g. avoid multiple funding streams with various administrative requirements).

QUOTE of CBI respondent:

'Social skills are the key for this process.'

With regard to the content and the design of the CBI, the most important factor that was stressed by the projects was the importance of continuous monitoring and data collection to allow for evaluation and adaptation of the intervention. Being able to tailor the intervention to the specific circumstances in a setting will contribute to its success. Continuous monitoring also allows for continuous reporting to funders. To be able to learn from experiences in, for example, other cities or neighbourhoods that implement the same CBI, means that exchange of information is necessary. The need for more evidence supporting the effectiveness and cost-effectiveness of CBIs was also deemed important by multiple projects. One project stressed the importance of having a baseline measurement. This particular project used the outcomes of that to fine-tune their intervention. Another project stressed the need for a strong theoretical basis. Adequate time for careful planning of the intervention, as well as for allowing collaborations to grow, should also be considered in the design of a CBI. Projects also mentioned that action should be sustained; follow up activities should be part of the CBI. Finally, it was recommended that CBIs should be comprehensive and multidisciplinary in nature, using integrated care pathways (i.e. a mix of community, clinical/residential and self-care models).

QUOTE of CBI respondent:

'Don't be too positive about outcome at the start.'

Transferability

The key issue determining transferability mentioned by the projects is a flexible intervention design, which allows for adaptation to local conditions elsewhere. For example, it was mentioned that the scope of certain interventions could be tailored to the available facilities. Also, the specific composition of the network involved in the intervention often depends on local circumstances. One project mentioned as an example of a transferable CBI an intervention in which schools can set their own goals and make their own plans.

There were a few projects that reported good transferability within their own country, but they foresee problems with international transferability. For example, a Mediterranean eating pattern, local production of quality fruits and vegetables, and a climate that encourages daily physical activity outdoors were mentioned as important elements of a Spanish CBI. These conditions will not be present in all European countries. An intervention in France uses the mayor as the local champion. As in most other European countries the mayor does not play a similar key role in the community as in France, and other local champions will need to be identified. Another example of problematic international transferability was reported by Ireland, where a CBI is linked to the Irish curriculum for primary schools. Many interventions

on the other hand can be transferred nationally as well as internationally. The EPODE methodology is a good example of a broadly implemented CBI.

In order to transfer a CBI to another setting, documentation of the methods is of course a prerequisite. Several projects mentioned that they have developed codes of practice, protocols, and handbooks for this purpose. It was also emphasised that it is important to report implementation experiences (facilitators, barriers) as well. This kind of information would be helpful when implementing the CBI in a new setting. The need to translate materials and high intervention costs were reported as a barrier for transferability. Strong support by local or regional authorities was mentioned as a facilitator.

QUOTE of CBI respondent:

'There is no problem to transfer the project to another country. Just during filling in this questionnaire I considered how poor the evaluation is. So this is for us necessary to improve.'

Recommendations related to intervention content

Addressing eating behaviour, specifically the speed of meal consumption, may be a quite useful adjunct to lifestyle modification when addressing childhood obesity: both for the obese and for obesity prevention. One CBI mentioned that the baseline measurement indicated the importance of focusing on the topics of sweetened drinks, fruit and vegetables. In general, it is necessary to keep information as simple as possible and in order to reach small children, the message can be told through a fairy tale and games. The evaluation of specific activities and possible reasons for negative or partially positive evaluations were discussed in section 3.4.

QUOTE of CBI respondent:

'Conditions for success: start from the daily life and concerns of a setting, work and evolve with them at their chosen speed, listen to the effect/evaluation of every intervention and adapt if necessary. Side effects: we realized that the children in the centres had specific issues around food (other than obesity) like food neophobia, eating disorders, very limited taste development. So we adapted our interventions to that.'

4 Overall conclusion and recommendations

The survey revealed that attention for obesity at an (inter)national level has stimulated implementation of hundreds of CBIs in European countries in recent years. This report summarizes information for 83 of them.

The median amount of funding for the included CBIs was €200,000 per CBI, but this figure may not be representative for all CBIs. In some countries, a substantial part of the youth population is targeted by CBIs aimed at reducing childhood obesity. Due to the detailed structure of the questionnaire we could quantify that about 700,000 European children have been reached with counselling by health care professionals and 275,000 with free provision of healthy foods within the context of a CBI. This is an underestimation since the included CBIs do not represent all CBIs and since these activities are also executed outside the context of CBIs. Although the included CBIs showed a large variation, also common characteristics could be identified. Almost all CBIs executed a mixture of strategies at a local level. The school was an important setting in the majority of CBIs and teachers were often involved as providers of the activities, as well as health professionals other than medical doctors.

For most quality indicators defined for this report, a majority of included CBIs reported compliance, but the following **gaps in information** were identified:
> A minority of CBIs reported the reach of (all) activities, the costs of their CBI and effectiveness. This report provides the practical output that was based on the CBIs for which this information is available, illustrating the relevance of collecting the data.
> More evidence is needed regarding the long-term effects of intervention activities specifically targeting overweight or obese children that can be incorporated in CBIs.
> Information is needed on the effects and costs of intervention activities targeted at specific age categories with well-defined objectives that can be incorporated in CBIs.
> More insight is needed into methods to overcome reported barriers. For example, some CBIs successfully involved commercial parties and other CBIs successfully linked their intervention to the school curriculum; how did they achieve this and what was the role of (national) policy?

Regarding the effectiveness of specific intervention activities, more information is available than presented in the report, and the present survey could serve as a basis for further investigation. In addition to this report, we recommend that a database facility become available, accompanied by a search function to locate (specific elements of) CBIs with an option to download materials, documents, handbooks, and transfer systems. Easy accessibility of high quality intervention materials will stimulate the improvement of CBIs. It is recommended that the database is developed in an interactive way, including an option to

continuously update information on the effects, costs and reach of CBIs. For the purpose of comparison, we stress the need for the standardization of the methodology for evaluation and data collection. We refer to the NOPA database as an international database to consider using as a source of information in the future (http://data.euro.who.int/nopa/). In coming years, project data of various obesity prevention projects will be added based on the 'good practice appraisal tool' (11).

National policy makers can stimulate future implementation of CBIs by prioritizing childhood obesity as a policy issue and facilitating the implementation of CBIs in the following ways:

- Make model CBIs available as protocols/handbooks that professionals can use; these need to be flexible because of necessary adaptation to local contexts. At least 12 European countries reported the availability of model protocols. In addition, one may consider promoting this report to professionals in order to develop/improve CBIs, since the next section serves as a 'practical toolkit' for health professionals.
- Provide (partial) sustainable funding through uncomplicated administrative funding systems.
- Stimulate intersectoral collaboration and public-private partnerships through an integrated national policy vision on CBIs, involving the Ministry of Education and other relevant ministries, so that reported barriers at a local level are overcome more easily.
- Support high-quality research/monitoring in the general youth population in cities where CBIs are implemented (or not). In this way, insight will be gathered regarding the population-based impact of the large-scale implementation of CBIs.
- Support high-quality research to evaluate specific intervention strategies, with clear objectives aimed at specific age groups that can be incorporated into future or on-going CBIs. Aim at an optimal standardization of study designs, outcome indicators, costs calculations, and assessment of reach.
- Promote exchange of information and experiences.

Regarding an optimal CBI approach, the available evidence suggests 'the more comprehensive, the better'. Since much information on CBI content is available, and in many cases well documented, we recommend that future funding focus more on monitoring and evaluation of existing approaches instead of developing new ones. Useful evidence will then become available that enables the optimization of on-going CBIs and provides insight into effective population-based approaches that really contribute to combat childhood obesity.

In conclusion, this report can inspire the development of new initiatives or improvement of on-going CBIs. Prioritizing childhood obesity and the facilitation of the implementation of CBIs within a national policy context are important conditional factors, but the local situation and the community needs should be the primary entry point. The present report and database can assist in developing an optimal approach.

5. How to use this report as a practical toolkit?

The target population for this section concerns public health professionals, who are planning to execute CBIs. As emphasized earlier: the local situation and community needs should be the entry point to start from. To a large extent, this determines the stakeholders involved, commitment from local policy, the funding scheme, possibilities available in the budget, settings where activities can be organised and the target population that should be considered. Furthermore: one should be aware of the national policy context. Section 3.1 provides a brief description per country, and it should be known whether a model CBI-protocol is available or advocated and whether national funds exist to apply for financial support.

This report can serve as a practical tool for developing CBIs and this is explained in the following section. CBI development is presented a four separate phases according to the stage of the CBI, namely:

Phase 1 – Early ideas about initiating a potential CBI
Phase 2 – (Primary) setting and age range of target population are known
Phase 3 – Fine tuning the protocol for a specific CBI (which has not yet begun)
Phase 4 – Optimize an on-going CBI

For each phase, the activities of the previous phase(s) are also relevant.

Phase 1 – Early ideas about initiating a potential CBI

In this phase you can use this report primarily as a source of inspiration.

► *Section 3.2* yields inspiration related to parties that can be approached, potential funders, ways of involving the target population, and health issues that can be addressed.

► *Section 3.4* yields inspiration about potential activities and instruments that could be executed in a CBI, and possible providers.

► *Section 3.6* yields inspiration about the reported effects of CBIs.

► *Annex 8* provides information on cities and regions where CBI activities are executed.

► *Annexes 3 and 11* can be used to select relevant literature for further orientation.

Phase 2 – Primary setting and target population are known

In this phase it is recommended to select similar CBIs from the annexes 9 and 13:

► *Annex 9*. Information on specific activities executed within CBIs.

► *Annex 13*. Settings and age ranges of target populations.

Thereafter, for the selected CBIs one can check the availability of a primary source document, theoretical basis, transfer system, and the necessity of providing professional training:

► *Annex 10*: provides information about the aforementioned aspects for each CBI.

Additional information can be obtained by searching for a specific CBI project on the internet.

► Furthermore, *section 3.7* is of relevance to be aware of barriers and promoting factors when planning on executing a CBI.

Phase 3 – Fine tuning the protocol for a specific CBI (which has not yet begun)

In this phase, you can use the information collected during phases 1 and 2 to develop a protocol or plan of execution for the CBI.

► Read *section 3.5* to be aware of the quality issues that need to be considered, some of which are discussed below in more detail:

a) A high quality primary source document that describes your CBI is important. The document should describe the theoretical basis for your CBI and existing evidence of similar CBIs. See *section 3.6* and *annex 11* for inspiration.

b) A process evaluation and continuous monitoring is stressed as an important element by the CBI coordinators (see section 3.7). *Annexes 5 and 6* can assist in selecting the items to collect, and *table 10* presents potential topics to be addressed.

c) When defining the specific goals of the CBI, you can use the specific health issues mentioned in *section 3.2*, examples of goals as mentioned in *section 3.5* and effects of previous CBIs (*section 3.6*) as a source of inspiration.

d) Assessing the costs of the CBI will yield important information for policy makers, especially when considering continuation and wider implementation. *Table 6* presents CBIs for which this information was available. Please be aware, that comparing between projects requires a standardized methodology (reference 7; Bogers *et al*. 2009).

► If your CBI is accompanied by an effect evaluation: read *section 3.6* and *annex 12* for possible outcome indicators (in line with your objectives), and the effectiveness of similar CBIs. To achieve a high quality study design it is advised to use previously published guidance as a basis (for example NICE guidelines, GRADE system, Cochrane reviews).

► Finally, learn from the practical experiences in *section 3.7*: be aware of the importance of recruiting a highly skilled and enthusiastic programme coordinator, sufficient funding, the availability of high quality materials, monitoring and the reasons why these are recommended.

Phase 4 – Optimize an on-going CBI

► *Section 3.5*: Be especially aware of the quality issues around transferability and incorporation of CBI activities in usual routines to ensure sustainable action. Search for (similar) projects to learn from experiences elsewhere (based on *annex 10*).

► Add successful elements, activities and/or instruments. *Section 3.4* provides a general overview of the activities and instruments that were executed in the included CBIs.

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Disclaimer

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Annexes

ANNEX 1 -

WHO definition of community-based initiatives and inclusion criteria for this survey

The WHO definition (www.emro.who.int/cbi/cbi_introduction.htm) :

> Community-based initiatives (CBI) adopt a holistic approach to health paying equal significance to the physical, mental, social and spiritual well-being of individuals. CBI programmes represent integrated bottom-up socioeconomic development models that rely on full community ownership and intersectoral collaboration.

Inclusion criteria for this survey:

1. The CBI should have a health objective involving prevention of obesity targeting nutrition and/or physical activity (please note that also interventions started from a disease prevention perspective (for example diabetes prevention) can be eligible for inclusion; since these projects generally target lifestyle behaviour with expected effects on overweight prevention))

2. The target population should include children aged 0 through 16 years (e.g. children 0-16, 5-10, 12-15).

3. The CBI should be implemented in the period 2005 through 2011

4. The CBI activities should have a (planned) duration of at least 1 year

5. Intersectoral collaboration of at least two different stakeholders[1] representing society partners should be an element of the CBI approach.

   This means that for the intervention at least one of the following options has to apply:
   a. More than one policy area (such as finance, justice, environment, education) provides (political) support to the intervention as is clearly defined in a policy document, and/or;
   b. There is a financial structure in which at least two society partners (stakeholders[1]) are providing funds, and/or;
   c. At least two stakeholders[1] from different settings collaborate. This entails collaboration between the primary setting (i.e. the setting where most activities of an intervention are organized) and another setting *within* the community. An example that meets this criterion is a school based approach involving collaboration with local shops or with organizational involvement of parents.

6. The strategy of the intervention includes clear involvement of members from the community in the planning phase of the intervention *or* in the implementation phase.

   Involvement of community members (citizens/target population or stakeholders[1] except local policy) in planning the intervention means that they participated in discussions, preferably indicated prevention of obesity as a priority topic because of a

[1] With stakeholders we mean representatives from society partners, who are able to influence the intervention, demand results from the intervention, participate in or receive services from the intervention, or hold the intervention accountable to regulations or standards representing society partners. Stakeholders are not individuals, unless involved because of their profession or an intermediary role during implementing the intervention. Examples of possible stakeholders representing society partners are community pharmacists, physiotherapists, health professionals, care workers, dieticians; food inspectors; the commercial sector involved in food and physical activity (like shops and fitness centres); schools (teachers, children, parents in a role as co organizers, et cetera); nursery, kindergarten; companies; municipal authorities; associations involved in leisure time activities like sports clubs

perceived need and/or agreed on the contents of the intervention before actual implementation.

For an intervention to meet the criterion of community involvement in the implementation phase, at least one of the following options should apply:

a. Financial structure in which community individuals or groups can apply for budget to start and coordinate activities that are part of the intervention, and/or;
b. Shared accountability of stakeholders[1] with clear documented description of their responsibilities during implementation and/or;
c. Active involvement of stakeholders[1] and/or clear intention of the intervention to stimulate new social networks to achieve less obesogenic influences.

7. The CBI approach should have a monitoring/evaluation component, which at least should consist of a process evaluation (results do not need to be available yet).

8. We are kindly asking you to select the main and/or original CBIs targeting childhood obesity in your country while neglecting all CBIs diverted from these interventions. So, it is only required to provide information for ORIGINAL CBIs. For example: if in your country one type of CBI (for example EPODE-like approaches) is supported from a national level and implemented in many regions it is necessary to complete the CBI-questionnaire only ONE time for this intervention).

ANNEX 2 –

Questions of short questionnaire (to be completed by key informants for each country)

1. For which country are you filling in this questionnaire?

2. Is reducing childhood obesity a priority in your national and/or regional public health policy?
0 Yes
0 No
0 Unknown

3 Which of the following options does best describe the situation in your country regarding CBIs against childhood obesity:

0 There is a central/national policy regarding CBIs targeting childhood obesity; local initiatives are in most cases derivations of a limited number of central/national examples.

0 There is no clear central/national policy on CBIs targeting childhood obesity, but (probably) many CBIs are implemented through local initiatives.

0 A combination of the above two options is the case (i.e. we have a central/national policy (involving 'model CBIs') and besides that also (probably) many initiatives at a local level are implemented, which are not clearly related to the CBIs that are supported as 'model CBIs' in the national policy).

0 There is no clear central/national policy on CBIs targeting childhood obesity, and not many CBIs are implemented through local initiatives either.

0 None of these options does adequately describe the situation in my country. → 3a

0 Unknown

3a →Could you please describe the policy situation in your country regarding CBIs against childhood obesity?

……

4. In this question, we ask for contact details for CBI experts that will receive a questionnaire about characteristics for a specific CBI that in your opinion fulfills the inclusion criteria stated in the email you received.

Please note that we only ask for the original CBIs (so for example: for 'EPODE', the CBI-questionnaire needs to be completed only once and we consequently ask for only one contact person, even if EPODE like approaches are implemented at a large scale in your country).

Depending on the policy situation in your country (question 2) the possibility exists that you identified (too) many 'original' CBIs, despite the fact that the inclusion criteria for this project are rather restrictive. In that case you are advised to make a selection; please consider which CBIs you would like to be added to the project/Commission database for best practice sharing and make a selection accordingly.

Could you please list the e-mail addresses of all contact persons (including yourself, if applicable) and the corresponding CBIs in the overview below? Please note that we recommend appointing one respondent to each CBI (to keep the workload acceptable) and that all information should be provided in English.

Name of CBI	Name of contact person:	e-mail address:
---	---	---

Would you like to add another CBI and contact person?

0 Yes →
0 No

→ Name of CBI	Name of contact person:	e-mail address:
---	---	---

Would you like to add another CBI and contact person?

Etcetera

5. In the previous question you provided an overview of CBIs in your country that fulfill the inclusion criteria. The possibility exists that you made a selection in case the total number of original CBIs (fulfilling the inclusion criteria) is too large. Could you please estimate how many of all eligible original CBIs against childhood obesity have been selected?

0 Not applicable, as I did not make a selection; we will provide information on (almost) all original eligible CBIs in my country

0 I selected most of the CBIs in my country →

0 I selected about half of all CBIs in my country →

0 I selected only a small selection of all CBIs in my country →

0 I don't know how many of all CBIs reducing childhood obesity I have selected →

5a. → In what way did you make the selection of identified CBIs? *(Multiple answers possible)*

0 I selected only the most important CBIs (implemented at a large scale)

0 I selected only well-known CBIs (that received a lot of media attention)

0 I selected only those CBIs for which information can be easily gathered

0 I selected only those CBIs that I am familiar with

0 I used another basis for selection → →

5a1 → → What other basis did you use for selecting CBIs?
……

6. What search method did you use to identify the eligible CBIs implemented in your country? *(Multiple answers possible)*

0 National and/or regional registries/databases of preventive interventions in my country

0 International databases of preventive interventions (like the Trials Register of Promoting Health Interventions (TRoPHI), the Canadian Best Practices Portal or the European Directory of Good Practices to reduce health inequalities)

0 Consulting policy documents

0 Consulting the organization/institution that is responsible for implementation of these CBIs in my country

0 Consulting reports on preventive interventions in my country

0 Asking colleagues/other professionals to provide information

0 Other method(s) →

6a. → What other method(s)?

7. Do you have any additional remarks?
0 Yes →
0 No

7a. → Please state these remarks below.

ANNEX 3 –

Inventory of existing sources that were screened for potentially suitable CBIs

- Database of Promoting Health Effectiveness Reviews (DoPHER)
DoPHER contains details of a large amount of systematic and non-systematic reviews of effectiveness in health promotion and public health worldwide.
- OECD Health Working Papers No. 48: Improving lifestyles, tackling obesity: the health and economic impact of prevention strategies
- OECD report: Obesity and the Economics of Prevention
- Health-promoting schools: a resource for developing indicators (report of the International Planning Committee of the European Network of Health Promoting Schools)
- Review of previous and existing actions, initiatives, policies on nutrition and physical activity (report of the EURO-PREVOB project)
- Focusing on Obesity through a Health Equity Lens (report from EuroHealthNet)
- Overview of good practices presented at the POIN-2010 conference as a result of the IMPALA project ; *http://www.impala-eu.org/poin2010/en/speakers*
- Overview of best practices collected by the PATHE project (*accessible through http://ec.europa.eu/eahc/projects/database.html: search for 'isca pathe': 6th link is the PATHE Handbook*)
- The Guide to Community Preventive Services
- WHO health evidence network (HEN)
- Final report of the EU-project: European Mapping of Obesity Best practice (EMOB)

Trials Register of Promoting Health Interventions (TRoPHI)
TRoPHI contains randomized and non-randomized controlled trials of interventions in health promotion and public health. This database is hosted by the EPPI-Centre, which is part of the Social Science Research Unit at the Institute of Education in London. Since August 2004 a quarterly search of the literature provides input to this database. Contact address is EPPIAdmin@ioe.ac.uk.
A freetext search in this database using 'obesity' resulted in 306 hits. Using 'childhood obesity' 48 interventions were identified.

The Canadian Best Practices Portal
The Canadian Best Practices Portal is a compendium of community interventions related to chronic disease prevention and health promotion that have been evaluated, shown to be successful, and have the potential to be adapted and replicated by other health practitioners working in similar fields. The portal was launched publicly in November 2006 and is a project of the Centre for Chronic Disease Prevention and Control (CCDPC) within the Public Health Agency of Canada (PHAC). The contact address is undisclosed, but questions may be asked through the 'contact us' button on the site.
Searching this database using the keyword 'obesity' resulted in 53 hits. Using 'childhood obesity' 8 interventions were identified.

European Directory of Good Practices to reduce health inequalities
This is a database containing good practices to reduce health inequalities and is part of DETERMINE – a EU consortium for Action on Socio-economic Determinants of Health.
Searching this database using the keyword 'obesity' resulted in 8 hits. Using 'childhood obesity' no interventions were identified. However, reviewing the previous 8 results showed that children were among the target populations.

ANNEX 4 –
List of potentially suitable projects, country, method of identification, and response

Country		Potentially suitable projects	Method of identification	Eligibility	Response
Austria	**1**	X-team	1		
	2	KIG Kinder im Gleichgewicht	1		
	3	teen power 10/14	1	8	
	4	Durch Dick und Dünn	1		
	5	Rundum gsund	1	5	
	6	Down and up	1	7	
	7	In.Form	1		
Belgium	**1**	Fitte School	3,4		
	2	VIASANO (EPODE methodology)	3		X
	3	Middle School Intervention	3		
	4	Tutti Frutti-project (fruit distribution in schools)	4		
	5	My active food triangle	4		
	6	Introducting healthy nutrition in special youth care centers	4		X
	7	Healthy behaviour at school Promotion plan	4		
	8	Gezondwerken (www.gezondwerken.be)	1		
	9	www.hartelijkebuurt.be	1		
	10	Zahnhygiene und gesunde Ernährung in Schulen	1		X
	11	Idefics	2		
Bulgary	**1**	Health 4 schools	3		
	2	Healthy eating in the kindergartens	4		
	3	Food and Nutrition Action Plan	1	1	
Cyprus	**1**	Cyprus Healthy Children Program	1		
Czech Republic	**1**	'Little Pyramid man'	1		X-e
	2	Healthy Teeth	1	5	
Denmark	**1**	Diet in a nutshell (national initiative)	1		X
	2	Shape Up lab	3		

Country		Potentially suitable projects	Method of identification	Eligibility	Response
	3	The Municipalities Plan against Obesity	3,4	2	
	4	Danish: Aktiv rundt i Danmark	3		
	5	'Boost - Frugt og grønt'	4		
	6	Spaces to move children. Local & Facilities Fund	4		
	7	Copenhagen School Child Intervention Study	4		X
	8	6 a day ('6 om dagen')	4		
	9	Whole Grain Campaign	4	3	
	10	Get moving	4		
Estonia	**1**	Shape Up lab	3	2	
	2	Camps for obese children	1	5	
Finland	**1**	Attention to Weight! - Weight Control Program	1		
	2	Children's Welfare Project (HYVIS)	1		
	3	MUUVIT	2		
France	**1**	Together let's prevent childhood obesity'	3		
	2	Shape Up lab	3		
	3	Program in the Aquitaine region	3		X-d
	4	Prevention overweight in preschool children	3		
	5	ICAPS	3		X
	6	'Health Behaviour in School-Aged Children'	4	2	
	7	Plan obésité	1		X
	8	Programme national nutrition santé	1		
	9	EPODE	2		X
Germany	**1**	Besser essen. Mehr bewegen.	1		X
	2	peb Projekt Junge Eltern - Ludwigsburg	1	7,8	
	3	FördeKids	1		
	4	Lebenslust-Leibeslust	1		X
	5	Aktionsplan Holsteinische Schweiz	1		
	6	Projekt T.A.F.F.	1		X
	7	CrescNet	1		X-d
	8	Kita Vital	1		X

Country		Potentially suitable projects	Method of identification	Eligibility	Response
Greece	**1**	The Vyronas study	1	4	
	2	The CHILDREN study	1		X
	3	Paideiatrophi	2		X
Hungary	**1**	HAPPY	1		X
	2	Start with breakfast!	1		
	3	Go Healthy! Programme	1		X
	4	Healthy kindergarten in Hungary	1		
	5	Eco-School Network	1		X
Iceland	**1**	Everything affects us, especially ourselves!	3		X
	2	6H.is	1		X
	3	Physical activity of Icelandic children	1		
Ireland	**1**	Little steps to healthy eating/ living	4	4	
	2	National programmes'Irisch Sports Council'	4		
	3	BeActive After-School activity programme	2		X
	4	School Meals Project, Limerick Food Partnership	2		
	5	The Gardening Club, Surestart Shantallow	2	4	
	6	Healthy School Food Policy	2		
	7	Fresh Fruit in Schools Project	2		X
	8	Pack a Punch	2		
	9	Breakfast Club	2		
	10	CAWT	2	4	
	11	Cook It	2		X
	12	Action for life	2		X
Italy	**1**	Crescere Felix	1	2	
	2	Gaining health	1	1	X-a
	3	Health aging	1	8	
Latvia	**1**	Project European Healthy Stadia Network	1		X-d
Lithuania	**1**	Course of action for School-children Nutrition	1	1	X-a
Luxembourg	**1**	Action plan GIMB	1		
Malta	**1**	Girls on the Move	4		

Country		Potentially suitable projects	Method of identification	Eligibility	Response
	2	Skolasport	4		
	3	Summer on the Move	4		
	4	Active Youngsters	4		
	5	Afterschool sports	4		
	6	Sportsbuzz	4		
	7	Sportsfun	4		
	8	Arti-Sport	4		
	9	Sports for all Initiative	4		
Netherlands	**1**	Communities in beweging	1	8	
	2	JUMP-in: GGD Amsterdam.	1		
	3	Lekker fit Rotterdam:	1		
	4	B-fit	1		X
	5	GO-Utrecht	1		X
	6	Familie Lekkerbek	1		X
	7	Gezond Nijmegen	1	3	
	8	Dik en doun in Grunn	1		
	9	Voorkomen overgewicht bij kinderen	1		
	10	Valthermond Gezond	1		
	11	Slagkracht Winterswijk	1		X
	12	B.Slim	1		X-d
	13	Gezonde Slagkracht van een Prachtstad	1		
	14	Gezonde Slagkracht Woerden	1		X
	15	Lekker in je vel	1		X
	16	De Gezondheidsrace	1		X
	17	Gezond inrichten Gageldonk-West	1	5	
	18	Raalte gezond!	1		X
	19	Wijkgezonder in Zeist	1		X
	20	Sociale activeringscampagne in de RNV	1		X
	21	Gezond in de buurt	1		
	22	Samen gezond	1		X

Country		Potentially suitable projects	Method of identification	Eligibility	Response
	23	Rivierenland in Balans	1		
	24	sCoolsport	1		X
	25	Fit en food	1		
	26	On the move - Haarlemmermeer	1		X
	27	JOGG	1	8	
Norway	**1**	Physical activity and healthy meals at school programme	4		
Poland	**1**	National Programme for Prevention Overweight 2007-2011	1		X
	2	Keep Fit	1		X
Portugal	**1**	Shape Up lab	3		
	2	PASSE	4		
Romania	**1**	Increase access primary medical prevention services	1		X
	2	I also live a healthy life!	1		X
Slovakia	**1**	Feedback method – with evaluation of body posture	4	4,5	
	2	Program health at schools in Trebišov district	4		
	3	National obesity prevention program	4		
	4	School fruit schematic program 'Skolske ovocie'	4		
Slovenia	**1**	Veter v laseh (Wind in your hair)	4		
	2	Razvoj pristopov za spodbujanje zdrave prehrane in gibanja v srednjih šolah	4		
	3	FIT Slovenia International	4		
	4	Zdrava prehrana, zdrava mladina	4	2	
	5	Šole, ki promovirajo zdravo prehrano (NFSI)	4		
	6	Pro greens	4		
	7	Vzgoja za zdravje (Education for health)	4		
	8	Projekt Jabolko (Apple project)	4		
	9	Zlati sonček (Golden sun)	4		
Spain	**1**	Program Perseo / Programa Perseo	1		
	2	Educative Program '5 per day'	1		
	3	Program Thao - (Programa Thao- Salud infantil)	1		X
	4	Delta Project	1		X
	5	Children moving (Niños en movimiento)	1		

Country		Potentially suitable projects	Method of identification	Eligibility	Response
	6	Communitary project in Berriozar	1		
	7	DISFRUITA-LA	1		
	8	Prevention of obesity in school-age population	1		X
	9	PAIDO	1		X
	10	Program for schools' dining halls in Madrid Community	1		X
	11	Plan Integral de Villanueva de la Cañada	1		
	12	Participative project in Extremadura	1		X
	13	NEREU Program (Programa NEREU)	1		
	14	MOVI Program	1		X
	15	Prevention project obesity	1		
	16	PIMSE	1	5	
	17	Move with us: Exercise looks after you	1		X
	18	Program in Molina de Segura	1		X
	19	CAPSA	1		
	20	PASEA	1		
	21	Integral plan in Murcia	1		X
	22	Córdoba for health	1		
	23	Attention in comunity health care centers	1		X
	24	Plan for physical Activity, Sport and Health (PAFES)	1		
	25	Strategy PAAS (Estrategia PAAS)	1	1	X-a
	26	Project in Rioja	1		
	27	Estrategia NAOS	1	1	X-a
	28	Integral Plan in Andalucia	1		
	29	POIBA project Barcelona	1		X
Sweden	**1**	Life in motion	4		X-d
	2	Skolmatsakademin (School meal Academy)	4		
	3	Runda barn (Överweight Children)	4		
	4	Enjoying Life - motion och mat för en friskare framtid	4		
	5	SECOPP	4	4	
	6	The Bunkeflo project	4		

Country		Potentially suitable projects	Method of identification	Eligibility	Response
	7	Familjeviktskolan [Family Weight School]	4		X-d
	8	Friska barn – förskolan	4		X
	9	Föräldrastöd för goda mat	4		X
	10	Implementing action plan 2004	4		
	11	PRIMROSE	4		
	12	SALUT	4		X
	13	Viktiga barn och ungdomar	4		
	14	STOPP	3		
	15	IDEFICS	3		
	16	Pro Greens	3		
	17	Gå eller cykla till skolan!	3		
	18	Health Equilibrium Initiative	2		X
	19	CBI (not specified)	2		
	20	Regional program Vastra Gotaland	2	3	
	21	Childhood obesity program in Jönköpiong County	2		X
	22	SCIP-school	2		X-d
Switzerland	**1**	Ballabeina study	3		
	2	Cantonal Intervention Programms	4	1	
	3	Pedibus	4		
	4	Aktion Znüni-Box ‘Gesundes Znüni’	4		
	5	prevention project children 0-3 years	4		X
	6	SchoolCatering for Children and Adolescent	4		
	7	Kinder-SportstudieKISS	4		
	8	Miges Balù	4		X
United Kingdom	**1**	CHOPPS	3,4		
	2	Snack right	3		
	3	Physical activity to prevent obesity	3,4		
	4	Walk to School campaign	4		
	5	Bike it & Safe Routes to School	4		

Country		Potentially suitable projects	Method of identification	Eligibility	Response
	6	Dragon sport	4		
	7	RCTadapting US school obesity prevention to England	3		
	8	APPLES	3	1	X-b
	9	MEND Program (Mind, Exercise, Nutrition… Do It!)	3		X
	10	The Children's Orchard	3	2	
	11	Fit 4 Life – Rushmore Healthy Living	3		X
	12	Shape Up Lab	3	4	
	13	Change4Life	4		
	14	The East Midlands Declaration – Change4Life'	3		
	15	Appetite for life	4		X-e
	16	Convenience Stores	3,4		
	17	Get Active Northumberland	1		
	18	On the Go	1		X
	19	Healthy4Life	1		
	20	Healthy weight communities	1		
	21	DASH (Do Activity Stay Healthy)	2		
	22	What's in Yours?' Healthy lunch boxes	2	4	
	23	Healthy Schools Plus - 'Food Factor'	2		
	24	Barnardo's Healthy Schools Play Projects	2	2	
	25	Why Weight Matters?	2		
	26	Food for Life Partnership (FFLP)	2		X
	27	HENRY	2		
	28	Bike It	2		
	29	Villa Vitality	2		X
	30	Active Play and Travel: Tackling Obesity	2		
	31	Antenatal Obesity Pilot	2		
	32	Activ8 Community Gym	2		X-e
	33	B Active Scheme	2		
	34	Care Pathway for Children under 3	2		
	35	Change for Life	2		

Country		Potentially suitable projects	Method of identification	Eligibility	Response
	36	Child Obesity Clinic: 'Mandometer' technology	2		X-c
	37	Early Years Family project	2	2	
	38	Fit for Life	2	2	
	39	Health & Well-being	2		
	40	Healthy Kids Programme	2		
	41	Healthy Weight, Healthy Lives	2	4	
	42	LEAPActive	2		
	43	Looking after me - Change4Life	2		
	44	Result!	2		
	45	Settling In Sessions	2	2	
	46	Step Up	2		
	47	Tiger Teams	2		
	48	Walk to School	2		
	49	Schools4Life	2		
	50	Tutors models.	2		
	51	Fun, Food and Fitness Project	2		X
	52	NCMP team (national childhood measurement programme)	2		X-d
	53	Bath and North East Somerset	2		
	54	Healthy Schools Plus South West	2	3	
	55	Bath and North East Somerset	2		
	56	Gloucestershire	2		
	57	Poole	2	2	
	58	Somerset Healthy Schools Plus programme	2	2	
	59	Five/60	2		X
	60	Nottinghamshire county	2		
	61	Fit and active families - Catch 22	2		
	62	Family Lifestyle club (FLIC)	2		X
	63	GO4it	2		
	64	Fun 4 Life	2		X
	65	Make it count	2		

Country		Potentially suitable projects	Method of identification	Eligibility	Response
	66	Weight Management Centre- lutton	2		
	67	Integrated obesity Care Pathway	2		X
	68	NHS Dudley MEND	2		X
	69	Leisure Services	2		
	70	School Travel Programme	2		
	71	Community Health Champions	2		
	72	A live and Kicking	2		X
	73	FRESH	2	2	
	74	Fit to Play	2	2	
	75	Exercise Referral	2	2	
	76	Skip4Life	2	2	
	77	Sport & Play Development	2	2	
	78	Healthy Schools Programme	2	2	

Legend:

Method of identification
1= Suggested by key informants
2= Suggested by other professionals
3= inventory of previous overviews and existing databases
4= WHO inventory 2008

Eligibility – reason non response
1= Action plan/campaign or reported period of implementation outside 2005-2011
2= Bounced e-mail address
3= Non-response actively indicated
4= Not fulfilling the inclusion criteria
5= Questionnaire not complete or respondent not able to fill it in (for example because of difficulty with English and too few data available)
6= Information provided by email/ word version, but not electronically
7= Technical issue (no link received)
8= Indicated interest and willingness to respond, but did not meet the deadline

Coding response
X= database completed
X-a: not fulfilling criteria: national action plan
X-b: not fulfilling criteria: period of implementation
X-c: not fulfilling criteria: intersectoral collaboration at local level
X-d: not fulfilling criteria: no involvement of target population [and/or network of parents/peers]
X-e: no process evaluation

ANNEX 5 –
List of items for the CBI questionnaire

Subjects and items	Request by EC	Selection from existing international databases	Input from RIVM team
GENERAL CHARACTERISTICS			
Title of CBI (GC1)	X	X	
Contact details (GC2)	X		
Country / Language (GC3)		X	
Duration of CBI (GC4, GC5)	X	X	
Target population (GC6)	X	X	
Target population involved in development (GC7, GC8)			X
Name and size of the community (GC9a-s)	X		
Setting of intervention (GC9)	X	X	
Contextual factors leading to CBI (GC10)			X
Theories used for development CBI (GC11)		X	X
Evidence for effectiveness of comparable CBI's (GC12)			X
Location of detailed information: primary source		X	
CBI recognizable by logo or slogan (GC14)			X
OBJECTIVES			
Health issues addressed / the problem (O1)		X	
Specific objectives of the activity (O2-O5)	X	X	
SETTINGS			
Main (and additional) setting of the CBI (SO1, SO2)	X	X	
Organizer of the intervention and partners (SO3)	X	X	X
Funding, financing modes (SO4)	X	X	
Public/private partnership and organizations involved (SO5, SO6)		X	X
Collaboration with health care (SO7)			X
INSTRUMENTS, ACTIVITIES AND METHODS			
Main instruments/activities used in the intervention, providers, special clusters as target groups (e.g. socially deprived), reach within target groups/providers, and results on evaluation by target groups/providers (IM1-20)	X	X	X
Special training requested for providers (IM21)			X
EVALUATION			
Process evaluation: topics and reports (E1)	X	X	X
Future continuation: CBI part of national/regional policies and/or (medical) procedures and in what way (E2)			X
Lessons learned from implementation(E3)		X	
Transfer system (like a handbook or staff training) available (E4)			X
Opinion about transferability to other communities/countries (E5)			X
Effect evaluation: design, results, reports (E6)	X	X	X
Total costs and costs per year per child reached (E7, E8)	X	X	
CONTEXT			
National registries/databases of preventive interventions available (C1)			X
Method used for gathering requested information to answer questions in the questionnaire (C2)			X
COMMENTS			
Additional comments on questionnaire			X

ANNEX 6 –

Microsoft Word version of the CBI questionnaire

Introduction:

This is a Word version of the electronic questionnaire that has been developed for gathering data on Community Based Interventions (CBIs) targeting childhood obesity in Europe.

This work is carried out in the framework of a European Commission funded project, which is performed by the National Institute for Public Health and the Environment in the Netherlands (RIVM), in collaboration with WHO-euro. The project will create a European wide overview of CBIs targeting childhood obesity, aimed at facilitating best practice exchange. The information will become available in a database at the website of the European Commission and in a summarizing report. As such, this project will provide an opportunity for you and your colleagues to share good intervention examples in your country with your European colleagues.

As it is more efficient if you have the required information at hand when you start filling in the electronic questionnaire, it is recommended to first gather the relevant information about your CBI. The aim of this Word version of the questionnaire is to help you with that; it gives an overview of the questions in the questionnaire, and describes what kind of more detailed information will be asked for (in case a particular situation is applicable for your CBI).

However, please note that the questions in the Word version are 'open', while in the electronic questionnaire you can simply click the applicable items from a pre-defined list in many cases. Therefore it is not recommended to complete this questionnaire on paper, but it simply can help you to have the relevant information at hand.

Given the information needs expressed by the European Commission for creating this envisaged overview of CBIs aimed at childhood obesity in Europe, the electronic questionnaire can be rather extensive, but this depends on the type of CBI. For example, for CBIs with many different activities, executed at a large intensity and at a wider scale implemented in your country, the electronic questionnaire will probably take more time to complete than for more 'simple' CBIs. Another important factor determining easiness to complete the electronic questionnaire will be whether the required information – as indicated in this Word version- is well documented and easily available.

Of course it would be highly appreciated if you could provide as much of the requested information as possible. Nevertheless, in some cases not all the requested information may be available, or it may not be feasible for you to gather all the information within the time span available. If this is the case, we kindly request you to please still fill in the questionnaire as far as possible, as all information you can provide will be valuable for the project and the European Commission.

Please note that we ask all information to be provided in English.

We will send you the link to the full electronic questionnaire shortly. We thank you very much in advance for your time and effort!

In case of any questions, please contact the project team at cbi.childhood.obesity@rivm.nl, or else by phone +31 30 2744297 (Wanda Bemelmans, project leader)

Some general remarks:

1) In most cases, in the electronic questionnaire, the answer categories are pre-defined and you can simply select the relevant items by clicking on them. An 'other' option is always available, to describe specific situations applicable for your CBI, if necessary. An 'I don't know' option is also available for each question.
2) In the electronic questionnaire at several places background information is provided to explain the questions more clearly (this is not incorporated in this Word version).
3) At the end of the electronic questionnaire a free field will be available for all kinds of remarks about your CBI and/or about the questionnaire/project.

GENERAL CHARACTERISTICS

What is the title of this community based intervention (CBI) about which you are going to fill in this questionnaire?

Do you agree to be registered as the contact person for this CBI in the database that is being created with this questionnaire?

In which country is or was this initiative taking place?

Which period were or are the intervention activities for this community based initiative planned to run? (for example: 2005-2007 or 2010-2014)

What was or is the duration of the activities as a whole (until now)?

Does the target population of this CBI solely include children (≤ 16 years of age)?
→ Additional questions follow on the specific age range of the target population

> *In the following question the 'target population' is referring only to children as being the population in which positive health effects and/or positive changes in behavior are to be achieved. Questions about the potential roles of parents will follow later in the questionnaire.*

Was the target population (children ≤16 years old) in any way involved during the development and/or implementation of the CBI?

→ If yes; you can click in the electronic version one option out of a list of options (following the so called 'Pretty's ladder of participation')

> *The next question is about the (geographical) level of executing this CBI. When thinking of a neighborhood, please use administrative boundaries to define the neighborhood and its size.*

At what level is or was this community based initiative executed?

0 City or village
0 Neighborhood
0 School
0 Nursery / Kindergarten / Day care centre
0 Other type of local community

→ Some additional questions follow on the name of the city and the size of potential target population.

Note: IF your intervention is implemented at a larger scale, the number of locations (and names/size(s) of target population (when known)) in your country is asked for. Furthermore, in that case you are kindly requested to fill in the subsequent questions in the electronic questionnaire according to protocol and/or according to the situation that applies in most cases (and note that you can always use a 'other option' to explain the specific situation for your CBI).

Which contextual factors were of importance to start up this community based initiative? (Multiple answers allowed)

0 High (perceived) need to take action against childhood obesity
0 Reducing childhood obesity is a priority in our national and/or regional public health policy
0 Existing collaborations between local networks of relevant parties
0 The possibility to connect to existing (local) policy initiatives
0 Key figures, for example in local policy, that were enthusiastic about the initiative
0 A best practice approach was available that could be easily applied in our situation
0 Much attention for prevention of obesity at a national level (TV, mass media)
0 No clear contextual factors can be identified, it just happened
0 Unknown
0 Other contextual factors

Were theoretical models or theories used to develop this community based initiative?

→ If yes, the scientific evidence to support appropriateness of the theoretical model with regard to the goals and target population of the CBI can be reported

Is published evidence available for the effectiveness of comparable community based initiatives? (so not about your own CBI, this follows later in the questionnaire)

→ If yes, additional questions follow on details of these articles, reports etc. and on where this evidence can be found

Is there a primary source document (report, article, web page) present for this CBI that for example describes the initiative as a whole, or specific activities?

→ If yes, additional questions follow on details of these articles, reports etc. and on where this evidence can be found

Is a specific logo or slogan used to make this CBI recognizable (in communication methods)?

SETTINGS AND ORGANIZATIONS

What is the main setting for this community based initiative?

0 Neighbourhood
0 Health care centers
0 Sports facility (e.g. fitness centre, soccer club, dance studio)
0 School
0 Nursery/kindergarten/day care center

0 Other setting
0 I don't know

What additional settings are involved in this CBI?
0 Neighbourhood
0 Health care centers
0 Sports facility (e.g. fitness centre, soccer club, dance studio)
0 School
0 Nursery/kindergarten/day care center
0 Other setting
0 I don't know

Who primarily initiated/developed this CBI at the local level?
(multiple answers possible)

0 (Local) policy
0 Public health organizations (e.g. municipal health services)
0 Health insurance companies
0 Community pharmacists
0 Physiotherapists, dieticians or other (paramedical) health professionals / care workers
0 Medical doctors (MD)
0 Food inspectors
0 Commercial sector involved in food (e.g. shops)
0 Commercial sector involved in physical activity (e.g. fitness centers)
0 Other companies (not directly involved in food or physical activity)
0 Sport clubs or other associations involved in leisure time activities
0 Schools (e.g. teachers)
0 Nursery, kindergarten, day care centers
0 (Network) of parents
0 Other organization (s)
0 I don't know

Please state the number of institutes or organizations that took or take part of the funding scheme of this CBI (so the number of funders)

→ Additional questions follow about type of institute or organization(s), part of the initiative funded by the organization(s)

Was funding obtained from local, regional or national policy for executing this CBI?
0 yes
0 no
0 I don't know

→ If yes, which policy area was/is (partially) funding the CBI?
0 Health (including food and sports)
0 Environment
0 Education
0 Finance / economics
0 Urban planning
0 Transport
0 Social welfare
0 Other policy area
0 I don't know which policy area

Do you know the (approximate) total amount that was funded for executing this CBI?

→ If yes, you can provide the total amount (when possible)

Does this community based initiative involve a public/private partnership?

→ If yes, you can simply click from a list the types of institutes/organizations involved in the partnership

OBJECTIVES

Which health issues were the initial reason for starting with this CBI? (Multiple answers allowed)

0 Cardiovascular diseases
0 Diabetes
0 Overweight and/or obesity
0 I don't know
0 Other health issues

Is this CBI (mainly) addressing nutrition and/or physical activity and/or specifically body weight/obesity? Multiple answers allowed.

0 Nutrition
0 Physical activity
0 Weight
0 Other lifestyle factors
0 I don't know

→ Additional questions follow on which aspects of nutrition, physical activity etc. are being addressed

Did this CBI include a specific goal regarding changing dietary behaviour/physical activity/body weight of the target population?
→ If yes, you will be asked to state that specific goal

INSTRUMENTS, ACTIVITIES AND METHODS

Which are the main instruments used in the intervention? Please mark the answers when the instrument is used (multiple answers possible).

1. Personal advice (individualized, tailored advice)
2. Counseling/therapy (on a longer term and more intensive and profound than personal advice)
3. Group education (for example class room based)
4. Incentives (like a discount on participation in sports or on healthy food)
5. Legislation
6. Media attention (in local media, newspapers), providing general information to raise awareness
7. Modification of the physical environment (e.g. decreases in portion sizes, construction of safe routes to school for promoting active commuting to school)
8. Modification of the social environment (stimulate new social networks between community members to achieve less obesogenic influences)
9. Professional training (e.g. training of health professionals, teachers)

10. Regulation (agreements between organizations and/or other actors involved)
11. Resource access (e.g. providing funds to stimulate activities as proposed by the community)
12. Service access (e.g. providing access to sports or leisure time activities)
13. Skill development (e.g. parenting skills)
14. Social support (e.g. in chatrooms or by providing opportunities to buddy up in exercise)
15. Treatment (e.g. drugs, involvement MD)
16. Working in groups on a project (e.g children preparing a presentation or performing a task together)
17. Other
18. I don't know

→ For those instruments that are being used in the CBI you are describing, you will be asked to provide some more specific information (open question).

Could you please indicate which of the following activities were part of the CBI? (multiple answers possible).

Q5a. Counseling by health care professionals in personal and/or group visits
Q5b. Educational meetings for parents/caregivers about healthy lifestyle
Q5c. Cooking classes or courses about healthy cooking
Q5d. Extra sport activities organized by and/or at school
Q5e. Distribution of leaflets/course materials (like recipes) about a healthy lifestyle
Q5f. Discussion meetings (about healthy food and/or exercise)
Q5g. Distribution of guides/schedules showing cycling/walking routes
Q5h. District/local health day(s)
Q5i. Exercise TV (TV-guided aerobic program)
Q5j. Education at schools about healthy lifestyle (e.g. teaching on food labels)
Q5k. Free provision of healthy foods at schools/day care centres
Q5l. Orientation in a supermarket (education about healthy food in a supermarket)
Q5m. Personal advice via internet and/or one visit counseling
Q5n. Social meeting(s) with activities like games or seminar(s), (partly) on nutrition and/or exercise
Q5o. Sports club (group sports/walking/cycling activities on a regular basis)
Q5p. Organized walks and/or cycle tours (non-recurrent; not on a regular basis)
Q5q. Other

→ For those activities that are part of the CBI, additional questions will be asked about:
- Persons involved in the activity
- Specific target groups or populations of the activity (like socially deprived, overweight/obese children, immigrants, girls, boys, disabled, or other)
- Reach of the activity (actual reach in practice and envisaged reach)
- Evaluation of the activity by target population(s)

In all cases answers can be provided by simply clicking the applicable options out of a list (an 'other' option is available for all questions, to describe specific situations applicable to your CBI, if necessary).

EVALUATION

Is there a process evaluation performed on the intervention of which results are available yet?

→ In case a process evaluation has been performed, additional questions will be asked about:
- Topics included in the process evaluation (by clicking items from a list)
- Availability of reports on the process evaluation

Has the continuation beyond the initially planned period of the CBI become part of national/regional policies?

→ In case the CBI has become part of national/regional questions, you can provide some additional information

What are the lessons learned from implementation until now (like unforeseen circumstances, positive/negative side effects, conditions for success)?

Is there a transfer system consisting for example of a handbook, protocols or staff training, that facilitates implementation in other regions?

What is your opinion about the transferability of the intervention to other communities/countries?

Is effectiveness of the intervention (CBI as a whole) on body weight or on (determinants of) eating habits or on (determinants of) physical activity assessed?

Note: This and the following questions are on the CBI as a whole. Information on the effectiveness of specific intervention activities (that were performed as part of the CBI) will be asked further on in the questionnaire)

→ In case effectiveness was assessed, some additional questions follow about the study design applied during the evaluation study

Are there any significant effects of the intervention (CBI as a whole) on:

- **the children's body weight, children's eating habits**
- **one or more of the 'personal' determinants (like knowledge, attitude, self efficacy) of the children's eating habits**
- **the children's physical activity**
- **one or more of the 'personal' determinants (like knowledge, attitude, self efficacy) of the children's physical activity**

→ In case there are significant effects, information on where reports/publications on the underlying evaluation studies can be found is asked for

Is effectiveness on bodyweight, on (determinants of) eating habits or on (determinants of) physical activity of specific intervention activities (that were performed as part of the CBI) assessed?

→ If yes, information on where reports/publications on the underlying evaluation studies can be found is asked for

Is effectiveness on bodyweight, on (determinants of) eating habits or on (determinants of) physical activity investigated in other populations besides the target group (children), like parents/caregivers or a general sample of community members?

→ If yes, information on where reports/publications on the underlying evaluation studies can be found is asked for

Are the total costs of the intervention known?

→ If yes, an additional question on what exactly are the costs will be asked

Do you know the average costs per year per child reached by the intervention?

→ If yes, an additional question on what exactly are the costs per year per child reached will be asked

ANNEX 7 –
Methodology rough estimation total number of CBIs

The methodology for estimating the total number of CBIs occurred by the following steps:

1) The 27 projects for the Netherlands were considered to represent a complete picture;
2) The number of projects per 100,000 Dutch children was calculated: eg. 0,7
3) For each country we took into account (see the columns in the table below):
    a. The number of potentially suitable projects (see annex 4)
    b. Opinion from key informant about representativeness of the projects
    c. The policy situation around childhood obesity and CBIs
    d. The number of children in that particular country
    e. The ratio of number of projects (a) per 100,000 children
4) Thereafter the total number of projects was estimated according to the following procedure
    a. In case the ratio (see 3e) was smaller than 0,7 and key informants reported that the selection probably was not representative (or unknown) and/or that probably many initiatives are going on (or unknown) we applied the ratio of 0,7 to that particular country (Aus, Be, Bu, Ge, It, Lat, Slo, Sp, UK, Cyp, Cze, Nor, Por, Slo, Swi)
    b. In case the ratio (see 3e) was smaller than 0,7, but key informants reported that the selection was representative or that a cental policy was the case we made an estimation based on the reported projects/information (Fi, Fr, Gr, Hun, Lit, Pol, Rom)
    c. In case the ratio (see 3e) was equal or larger than 0,7, we made an estimation based on the number of reported projects/information (Dk, Es, Ic, Ir, Lux, Mt, Swe)

	3a (N)	3b [a]	3c [b]	3d [c]	Per 100.000[d]	Estimation total N
Austria	7	All	PM-NC	1,7	0,4	12
Belgium	11	unknown	PM-com	2,4	0,5	17
Bulgaria	3	All [e]	PM-com	1,4	0,2	10
Denmark	10	All	PM-com	1,4	0,7	10
Estonia	2	unknown	PM-NC	0,3	0,7	2
Finland	3	Most	PM-NC	1,2	0,3	5
France	9	All	CP	15,3	0,1	9
Germany	8	small	PM-com	15,3	0,1	107
Greece	3	Most	PM-NC	2,2	0,1	5
Hungary	5	Half	PM-com	2,1	0,2	10
Iceland	3	unknown	Not many	0,1	3	3
Ireland	12	Most	PM-NC	1,2	0,9	12
Italy	3	All [e]	PM-com	11,5	0,03	80
Latvia	1	Small	Not many	0,4	0,3	2
Lithuania	1	Most		0,7	0,1	5
Luxembourg	1	Small	CP	0,1	1	1
Malta	9	unknown		0,1	9	9
Netherlands	**27**	**All**	**PM-com**	**4,0**	**0,7**	27
Norway	1	unknown	Not many	1,2	0,1	4
Poland	2	All	CP	8,1	0,02	2
Romania	2	All	Not many	4,4	0,05	2
Slovakia	4	unknown	PM-com	2,0	0,2	14
Spain	29	Small	PM-com	9,1	0,3	63
Sweden	22		PM-NC	2,2	1	22
United Kingdom	78	unknown	PM-com	14,7	0,5	103
Cyprus	1			0,3	0,3	2
Czech republic	2			2,1	0,1	14
Portugal	2			2,2	0,1	14
Slovenia	9			0,4	2,3	9
Switzerland	8			1,6	0,5	11
Liechtenstein	-			0,04		0
Total N:	278					586

[a] opinion of key informant about completeness of projects; [b] policy situation (PM=probably many CBIs; NC= not centrally organized; com= combination of central and decentral organizational structure; CP=central poliy); [c]= number of children 0-19 years * 1,000,000; d= ratio number of projects per 100,000 children (3d*10/3a); [e] one of the reported projects concerned a national strategic plan;

ANNEX 8 -
List of included projects: geographical regions, cities and potential target population

Country/project	Cities, geographical regions and potential target population
Belgium	
Viasano (EPODE)	Aarschot (2900), Hasselt (5107), Jette (3982), Huldenberg (898), Marche en Famenne (1803), Mouscron (4439), Woluwe Saint Pierre (3468)
Zahnhygiene	Eupen (200), Saint Vith (150), (all schools in German-speaking community) Total = 2000
Youth care	Brussels
Czech Republic	
Little pyramid	Brno, Praha, Hradec Králové, Liberec, jihlava, olomouc, Zlín
Denmark	
Diet in a nutshell	All schools potentially can participate
Copenhagen project	All schools in the Municipality of Ballerup (suburb of Copenhagen); Total = 600
France	
Aquitaine region	All cities involved in Aquitaine region (cities change every year)
ICAPS	Bas Rhin county originally (for fthe uture extension is planned for thousands of children)
EPODE	240 Towns in the French Territory; All population affected by the programme; 4 million (estimation: 973,386 children)
Arnaud / plan obesite	All schools
Germany	
Besser essen …	Paderrborn, Hillesheim, Münster, Ludwigsburg, Templin, Neuss, Gelsenkirchen, Aachen, Marburch, Leipzig, Dortmund, Bremen, Nordhausen, Berlin, Saarbrücken, Nürnberg, Barleben, Hamburg, Aurich, Rostock, Herford, Eutin, Hannover, Bad Neuheim
Lebenslust	The Federal State Schleswig-Holstein
Kita vital	District Rhein-Sieg-Kreis (50 kindergartens)
Crescnet	Saxonia (n=167 paediatric practices) + n=149 in other federal states (coordinating centre: Leipzig); potential target population children <16 years; 432,506

Country/project	Cities, geographical regions and potential target population
TAFF	Family intervention all over Germany
Greece	
PAIDEIATROFI	Palaio Faliron (12,000), Agia Paraskevi (3,900), Argyroupoli (5264), Perama (1900), Delfi (2200), Kalivia (1500), Galatsi (6000), Thiva (3100), Kifissia (5000), Korinthos (3200), Maroussi (8500), Nea Chalkidona (3500), Pavlou Mela (5500), Kalymnos (1800)
Children study	Ioannina (max 1150)
Hungary	
Ecoschool	>500 member schools; Total : 150,000
Happy	HAPPY week is a nationwide program, implemented in 17 counties and Budapest. In 2010 24000 and in 2011 28000 children were participating
Go healthy	55.000 families / appr 100.000 children country wide; every year new children of 1,650 joined kindergartens get HealthBag.
Iceland	
Everything affects us, especially ourselves	24 municipalities (78% of the population)
6H	Reykjavik (28,000); rural area (17,000); 10,000 (health counseling) 15,000 (group counselling) each year
Ireland	
Action for life	At schools
The Be Active After-School Activity Programme	HSE Dublin North East Region Total number of schools: 595. Participating schools: 47 Participating children: 1,379
Fresh fruit schools	Health Service Executive North Eastern Region covering Louth Meath Cavan and Monaghan; 14 designated disadvantaged schools within the North East Health Service region
Cook it	Northeast region- counties louth, Meath ,Cavan and Monaghan (40 schools received training- 14 delivered in 2009, 25 delivered in 2010 and 19 delivered in 2011)
Latvia	

Country/project	Cities, geographical regions and potential target population
European healthy stadia	
Netherlands	
B slim beweeg meer	Amersfoort
Fam lekkerbek	Eindhoven
B fit	Doesburg (600), Oude IJsselstreek (400), Rijnwaarden (500), Ede (500), Harderwijk (300), Nijkerk (600), Wageningen (200), Barneveld (250), Elburg (250), Rheden (300), Oldebroek (100), Nunspeet (150), Putten (150), Ermelo (150), West Maas en Waal (100). Total CBI=4550
Social activation strategy (goed bezig)	Harderwijk (zeebuurt) (500), Wezep (spoorwijk) (250)
samengezond	Zwolle (holtenbroek, diezerpoort) (2000+525)
Gez gewicht overvecht	Utrecht (6500)
Gezonde slagkracht	Woerden (8000)
Wijkgezond Zeist	Zeist
On the move	Haarlemmermeer, Aalsmeer, Uithoorn, Aalsmeer; 65 primary schools
gezondheidsrace	Laarbeek (4100)
Lekker in je vel	Den Bosch
Slagkracht	Winterswijk (170), Arnhem, Rijnwaarden,Enschede, Oude IJsselstreek, Cuijk ; total = 600
Raalte gezond	Raalte (300)
sCoolsport	Kapelle (265), Terneuzen (98), Biggekerke (99), Gapinge (33), Oostkapelle (64), Middelburg (991), Vlissingen (150), Goes (196), ‘s-Heerenhoek (217) ; Total = 2113
Poland	
National program	Warsaw (+other regions)
Keep fit	890,000

Country/project	Cities, geographical regions and potential target population
Romania	
SETS	Bucharest; 60 000 parents, 1200 teachers, 30 000 pupils IInd and IIIrd degree had been activated in SETS until now
Increase access	Bucharest (200,000)
Spain	
Extremadura	Badajoz + Cáceres (= 2 regions within Extremadura), Mérida (= capital), Plasencia, and others (in Extremadura) + 30 other cities/villages (total number of municipalities =380); (D): 5000 children in every city in Extremadura, each year
Molina de Segura	Molina de Segura (14,000)
Delta	Santa Cruz de Tenerife (27,000), San Cristóbal de La Laguna (26,500), Adeje (4500), Firgas (900), + unknown (Canary Island / in total aims at reaching 200,000 6-16 yr olds)
Murcia	Murcia + 30 cities/villages; 86000
PAIDO	Valencia
Program dining	The Region of Madrid; all students enrolled in the 2010/2011 academic year: 314,368
THAO	Aranjuez (6000), Castelldefels (1500), Sant Carles de la Ràpita (1000), San Juan de Aznalfarache (2000), Villanueva de la Cañada (4000); The 5 previous cities were the pilot towns, now Thao Programme is being implemented in more than 100 city or villages
Moviprogram	Guenca Province (600)
Prevention	Los Centros Escolares de las 7 Islas Canarias
POIBA	Barcelona (12,000)
Community health care centres	Andalucia; 712 schools. Number of children unknown.
Move with us	6 cities (Montijo, Plasencia, Villafranca Barros, Merida, Don Benito, Badajoz)
Sweden	
Family weight school	Malmö (3600) + 6-8 other cities
Health equilibrium	Gothenburg (angered + östra); Angered = 40000 inhabitants, Gotenburg tot=500.000
Parental support	Nacka (1200)

Country/project	Cities, geographical regions and potential target population
Scip school	Österaker (4500)
Child health / salut	15 cities in county Västerbotten (54,000) (B) About 80 % of first time expectant parents participate in educational meetings within antenatal care during pregnancy and about 50 % of first time parents participate in educational meetings arranged by child health care centres during infancy.
Jönköping	13 cities in Jönköping county (80,000)
Life in motion	Region halland (all schools) // halland has about 300,000 inhabitants / 72.000 children (numbers uncertain)
Friska barn	All the 25 community driven preschools in Skärholmen - a suburban part of the city of Stockholm; Skärholmen, Stockholm (2000)
Switzerland	
Prevention project	Basel (day care centres; children university hospital)
Migus Balou	Pilot: St.Gallen, Rohrschach (450) Multiplication: 5 cantons plus 15 communities in other cantons
United Kingdom	
Appetite for life	Wales (all schools) (450,000)
Active 8 com	Plymouth
Villa vitality	Birmingham (12,000)
Alive and Kicking	Suffolk, London Borough of Sutton & Merton, London Borough of Hounslow, Halton & St Helens, Luton, Hull
NHS Dudley	
Fun4life	Walsall
On the go	Newcastle upon Tyne (4200)
Integrated obesity Care Pathway	Yorkshire - County wide Major cities incorporating the intervention include, Rotherham, Sheffield and DoncasterRotherham, Sheffield and Doncaster
Family lifestyle	Leicestershire county (started on a small scale in 2010)
ncmp team	Pan Sandwell (hundreds of schools)
Fun, food, fitness	Caerphilly (12,000)
Fit4life	Farnborough (2 schools)

Country/project	Cities, geographical regions and potential target population
Food for Life Partnership	180 'Flagship' school & communities, and 3600 'partnership' schools & communities (across England) (J) The programme encourages an increase in uptake of free school meals. Not by giving free food but schools are expected to encourage pupils to eat their free school meals. 13% more pupils eat the free school meals to which they are entitled.
Five/60	Derbyshire (8000)
Novel treatment	Bristol
MEND	350 communities in UK (28,000)

ANNEX 9 -
List of included projects: activities and number of children reached

The table shows the number of children reached for the following activities:

A: Counselling by health care professionals in personal and/or groups visits
B: Educational meetings for parents
C: Cooking classes
D: Extra sport activities at schools
E: Distribution of leaflets/course materials (like recipes) about healthy lifestyle
F: Discussion meetings
G: Distribution of guides/schedules showing cycling/walking tours
H: District / local health day
I: Education at schools about healthy lifestyle
J: Free provision of healthy foods at schools/day care centres
K: Orientation in a supermarket
L: Personal advice via internet and/or one visit counselling
M: Social meetings with activities like games or seminars, (partly) on nutrition and physical activity
N: Sports club (group sports, walking/cycling activities on a regular basis)
O: Organized walks and/or cycle tours

NOTE about the **question marks**: One question mark indicates that this activity was executed within the CBI, but no information has been reported about the reach (number of children). Two question marks indicate that it is not completely clear whether the activity has been executed as part of the CBI (as reported by the CBI contact person);

NOTE 2: at the bottom of the table the **summary statistics** are presented, which are used as the basis for table 5.

Country/project	**Reported number of children reached by activities A – O**															
Belgium		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**
Viasano (EPODE)		?	?	?	?	?			?	?	?				?	?
Zahnhygiene		?				?	2000			2000						
Youth care		50	50	30		50	50				30			30		
Czech Republic		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**
Little Pyramid		??				?	?							?		
Denmark		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**
Diet in a nutshell			?				?			?			?			
Copenhagen project		?			600	600										
France		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**
Aquitaine region		?			?	10.000	?			10.500						
ICAPS			?		380	475	475	430	430	475						?
EPODE			?	?	?	?	?			?				?		
Arnaud / plan obesite		?		?	?	?	??	?	?	?		?			?	?
Germany		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**
besser essen …			?	?	?	?	?	?	?	?		?		?	?	?
Lebenslust		11.000	?	?			?							?		
Kita vital		?	?	?	?	?				?						
crescnet		?				?										
TAFF		?				?							?			
Greece		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**
PAIDEIATROFI			100,000	?	?	100,000	?		?	?				?		?
Children study			?	?			??			?				?		
Hungary		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**

Ecoschool					?					?						
Happy		?			?	?				?	40,000					?
Go healthy			100,000	??		100,000	13,000		55,000		100,000			2000		
Iceland		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**
everything affects us, especially ourselves						?	?								??	??
6H * assumptie: 3 yr		75,000				?	30,000			30,000			?			
Ireland		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**
Action for life							?			?						
The Be Active After-School Activity Programme					1379	4000										
Fresh fruit schools						4000				?	4000					
Cook it				1713		1713				?				1713		
Latvia		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**
European healthy stadia		??	??			??	?							12	?	
Netherlands		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**
B slim beweeg meer		?	?	?						?		?				?
fam lekkerbek		100	??	??	??	??				??		??			25	
B fit			?		4000	4000	?			4000						
Social activation strategy (goed bezig)			?		?	?			?	?				?	?	
samengezond		?	?	?	?	??	?		?			?		?	?	

Gez gewicht overvecht			?		?	750				2800						
Gezonde slagkracht		?	?		?	?	??	2000	4000	?		?			?	?
Wijkgezond Zeist		?	?			?			?	?						
On the move		?		?	?					?	?			250 p.y.		?
gezondheidsrace		?		?		?			?				?	?	?	
Lekker in je vel			40		40	40	40	??		?			40	??		
Slagkracht		28	?		20	100			?	?	?		50	80	100	
Raalte gezond		?			40				?			?				
sCoolsport			?		2000	2000				2000				?		
Poland		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**
National program						?	?		?							
Keep fit				?	?		?		?	?						
Romania		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**
SETS		?	?		3500	30,000	?					150		3500	3500	
Increase access		?	?	?	?	?	?		?	?						
Spain		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**
Extremadura		?	?	?	5000		?	5000		5000	5000	5000		5000		5000
Molina de Segura		?				5000		?		15,000						
Delta		80,000	?	70,000	10,000	85,000	50,000	?		7500	?	?		50,000	?	
Murcia		?	20,000	?		40,000	?	?	10,000	?			?	?		
PAIDO		4500	750	250	500		500						?			
Program dining						?	?									
THAO		?														
Moviprogram					500									500		

Prevention		?	?				?	?		?			?	?		
POIBA		?	1080		1260	1800	1800			1800	1080			1800	1440	
Community health care centers		?	?		?	?				134,723	?					?
Move with us		100	120				120			?				120		
Sweden		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**
Family weight school		144	144			144	144									
Health equilibrium		?	?			?	?									
Parental support			120			120				120						
Scip school		?	?		?	?		??		4500	?					
Child health / salut		54,000	?				?									
Linda frank		?	?	500	?	?	?									
Life in motion			?		?	?			?							
Friska barn			2000			?	?									
Switzerland		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**
Prevention project		?	100			?							??			
Migus Balou			450			?	?									
United Kingdom		**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**
Appetite for life			??	?	??	?	?		??	?	?	??		?		
Active 8 com							?							?		
Villa vitality				12,000	12,000	12,000	21,000			21,000						
Alive and Kicking			480	480	480	1000	480		?	?		200	?	480	?	
NHS Dudley		200	200				200					160				
Fun4life			?		?	?	110	110					?	110	110	110
On the go			?	?		?	?									?

Integrated obesity Care Pathway			3000			3000	3000		?	3000		?	5000	3000	3000	
Family lifestyle		60	60	60	60	60	60	60								
ncmp team					??											
Fun, food, fitness		90	90		?											
Fit4life			?		30											
Food for Life Partnership				11,000												
Five/60		?	8,000	8000	8000											
Novel treatment																
MEND		28,000	28,000	28,000		28,000	28,000					?		28,000	28,000	
Summary statistics																
		A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**
Total number of children reached by activities (n CBIs) [1]		253,272 (n=14)	264,684 (n=20)	132,033 (n=11)	49,789 (n=19)	433,852 (n=26)	150,797 (n=18)	7,600 (n=5)	69,430 (n=4)	244,418 (n=16)	150,110 (n=6)	5,510 (n=4)	5,090 (n=3)	96,595 (n=16)	36,175 (n=7)	5,110 (n=2)
Number of CBIs that did not report reach		n=30	n=31	n=18	n=22	n=30	n=28	n=6	n=16	n=27	n=7	n=9	n=9	n=14	n=10	n=11

[1] Calculation made by summing up the numbers as reported by the CBI respondents. The RIVM project team did not check quality and validity of the data. Double counts may have occurred for various activities.

ANNEX 10 -
List of included projects: quality indicators

The table presents information for each CBI according to the following quality indicators:

1) Presence primary source document and either website or author/reference is provided
2) Specific goal for nutrition, physical activity, body weight assessed
3) a) Additional information about reach of intervention activities
   b) Presence of a logo and/or slogan
4) Theoretical basis/previous evidence + reference provided
5) a) Total costs reported
   b) Costs per child reached
6) a) Incorporation in policy documents (beyond initially planned period)
   b) Incorporation in policy documents + budget
   c) Incorporation in usual clinical guidelines
7) a) Availability transfer system
   b) Special training required

IMPORTANT:

Please note that the table relies completely on reported information through the questionnaire, which is not checked for validity or quality. In case of quality indicator (2) an empty cell can also indicate that the process evaluation is planned, but not yet finished, and also in other cases an empty cell should not be automatically interpreted as being absent or a sign of suboptimal quality of the particular CBI. The table should be seen as a general impression.

		Compliance with quality indicators 1 – 7b ('O' indicates compliance)											
Country/project	**CBI?** [1]	**1**	**2**	**3a** [2]	**3b**	**4**	**5a**	**5b**	**6a**	**6b**	**6c**	**7a**	**7b**
Belgium													
Viasano (EPODE)		O	O		O	O	O						O
Zahnhygiene			O	O	O		O				O		
Youth care		O	O	O	O		O					O	O
Czech Republic													

		Compliance with quality indicators 1 – 7b ('O' indicates compliance)											
Country/project	**CBI?** [1]	**1**	**2**	**3a** [2]	**3b**	**4**	**5a**	**5b**	**6a**	**6b**	**6c**	**7a**	**7b**
Little pyramid							O						O
Denmark													
Copenhagen project		O	O	O					O	O		O	O
Diet in a nutshell					O		O						O
France													
ICAPS		O	O	O	O	O			O			O	O
EPODE		O	O		O				O			O	O
Aquitaine region	X	O	O	O					O	O		O	O
Arnaud / plan obesite			O		O	O					O	O	O
Germany													
besser essen …		O			O				O	O		O	O
Lebenslust		O	O	O	O							O	O
Kita vital		O			O							O	O
TAFF			O		O								O
Crescnet	X	O	O		O							O	O
Greece													
PAIDEIATROFI		O	O	O	O			O					O
Children study		O	O			O						O	O
Hungary													
Ecoschool		O	O		O				O	O		O	
Happy		O	O	O	O	O			O			O	O
Go healthy			O	O								O	O
Iceland													

		Compliance with quality indicators 1 – 7b ('O' indicates compliance)											
Country/project	**CBI?** [1]	**1**	**2**	**3a** [2]	**3b**	**4**	**5a**	**5b**	**6a**	**6b**	**6c**	**7a**	**7b**
6H		O	O	O	O				O	O	O	O	O
everything affects us-			O		O						O		O
Ireland													
Action for life					O								O
The Be Active After-		O	O	O	O	O	O	O	O	O		O	O
Fresh fruit schools		O	O	O			O	O					
Cook it		O		O								O	O
Latvia													
European healthy	X	O	O	O	O				O				O
Netherlands													
fam lekkerbek		O		O	O				O	O		O	
Samengezond		O	O		O	O			O	O			O
B fit		O		O	O				O	O			O
Gez. gew. overvecht				O	O				O	O			O
On the move		O		O	O	O	O					O	
Lekker in je vel		O	O	O								O	O
Gezondheidsrace		O	O		O		O					O	
Wijkgezond Zeist		O	O		O								
Social activation strat			O		O				O			O	
Gezonde slagkracht		O	O	O		O			O	O		O	O
B-slim beweeg	X	O	O		O								O
Slagkracht		O	O	O	O	O			O			O	O
Raalte gezond		O		O	O								O

		Compliance with quality indicators 1 – 7b ('O' indicates compliance)											
Country/project	**CBI?** [1]	**1**	**2**	**3a** [2]	**3b**	**4**	**5a**	**5b**	**6a**	**6b**	**6c**	**7a**	**7b**
sCoolsport		O	O	O	O	O	O	O	O	O	O		
Poland													
National program		O			O				O	O			
Keep fit		O	O		O			O				O	O
Romania													
Increase access		O	O		O	O			O	O		O	
SETS		O	O	O	O				O	O			O
Spain													
Educacion par		O	O		O	O	O	O	O	O		O	O
Integral plan		O	O		O		O	O	O	O	O	O	O
THAO					O	O			O		O	O	O
Molina de Segura		O	O	O	O								O
Delta		O	O	O	O		O					O	O
PAIDO		O	O	O	O	O							O
Program for s		O	O	O	O				O	O		O	O
Moviprogram		O	O	O	O		O	O	O	O		O	O
Projecte de pr			O		O	O	O						O
Prevention		O	O								O	O	O
Move with us		O	O	O	O	O	O					O	O
Prevention and		O	O		O	O			O		O	O	O
Sweden													
Jönköpiong County			O	O	O	O			O	O	O		O
Child health / salut		O	O	O	O	O			O	O	O	O	O

		Compliance with quality indicators 1 – 7b ('O' indicates compliance)											
Country/project	**CBI?** [1]	**1**	**2**	**3a** [2]	**3b**	**4**	**5a**	**5b**	**6a**	**6b**	**6c**	**7a**	**7b**
Parental support		O		O		O							O
Health equilibrium		O	O			O						O	O
Friska barn		O	O	O	O	O			O			O	O
Scip school	X	O	O	O								O	O
Family weight	X	O	O	O		O	O	O			O	O	O
Life in motion	X	O	O		O		O					O	O
Switzerland													
Prevention project				O	O							O	O
Migus Balou		O	O	O	O	O	O	O	O	O		O	O
United Kingdom													
NHS Dudley		O	O	O	O			O				O	O
Villa vitality			O	O				O				O	O
Alive and Kicking			O	O	O	O						O	O
Fun4life		O	O	O	O	O	O	O			O	O	O
On the go			O		O			O					O
Integrated obesity Care Pathway			O	O	O	O						O	O
Active 8 com. gym					O		O	O					O
appetite for live		O	O		O				O	O		O	O
Food Life Partnership		O	O	O	O		O						O
Five/60		O	O	O	O		O	O					
Fit4life		O	O	O	O		O						O
Fun, food, fitness			O	O	O		O	O				O	O

		Compliance with quality indicators 1 – 7b ('O' indicates compliance)											
Country/project	**CBI?** [1]	**1**	**2**	**3a** [2]	**3b**	**4**	**5a**	**5b**	**6a**	**6b**	**6c**	**7a**	**7b**
ncmp team	X		O										O
Novel treatment	X		O										O
MEND			O	O	O	O			O	O		O	O
Family lifestyle		O	O	O	O	O			O	O			O
Summary statistics													
		N=61	N=68	N=49	N=66	N=30	N=26	N=17	N=34	N=25	N=13	N=51	N=71
		73%	82%	59%	80%	36%	31%	20%	41%	30%	16%	61%	86%

[1] X = projects does not seem to be complying with all inclusion criteria, and therefore it is doubtful whether they can be considered as truly community based (see annex 4).
[2] The indicator requires information on number of children reached for specific activities. Some of the CBIs, which are not marked here, did report on the potential target population (see annex 8).

ANNEX 11 -

List of references provided by the CBI respondents related to theoretical basis and existing evidence

NOTE: this list has not been cleaned or categorized by the RIVM team. It is presented in alphabetical order;

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ANNEX 12 -

Effectiveness

Title of CBI	Country	Level of execution/ setting	Sample characteristics	Instruments and activities	Design characteristics	Reported effects Reports	Type of measurement Objective/ subjective	Source
EPODE (Ensemble Prévenons l'Obesité des Enfants)	France	Neighborhood_School	Size: CG: Bois-Grenier and Violaines town IG: 479 (Fleurbaix and Levantie town) Age: 5 to 12 years old	Incentives Professional training Media attention Physical environment Social environment Service access Action for parents Working in groups on a project Cooking classes Extra sport activities Counseling Sports club Group education Education as a general tool	Random sample selection: yes Comparison with another region: yes Follow up at 12 years from the start of intervention (since 2002 targeting the whole community)	End of intervention (2004) BMI Mean (CI) Boys IG: 15.7 (15.5; 15.9) CG: 16.5 (16.2; 16.8); p=.02 Girls IG: 15.7 (15.5; 15.9) CG: 16.4 (16.0; 16.7); p<0.005 Cross sectional comparison 2004 Period 2002-2004 Prevalence overweight: Boys IG : 10% to 7% Girls IG: 17% to 10% Within study population: decreased prevalence appr. 5%	Objective: BMI standardized scales (e.g. Tanita)	1
ICAPS, Intervention Centered on Adolescents' Physical activity and Sedentary behavior	France	Neighborhood_School	Size: CG: 479 (4 schools) IG: 475 (4 schools) Age CG: 11.7 (0.7) IG: 11.6 (0.6)	Group education Working in groups on a project Media attention Modification of physical environment Modification of social environment Service access Actions targeted at parents Extra sport activities Education about healthy lifestyle Personal advice	Random sample selection: yes Comparison with another region: yes Follow up measurement after 6 months and 4 years from baseline,	After 6 months: Comparison of changes in IG vs CG (%) & OR Supervised PA CG: 58% IG: 83% OR: 2.74 (2.01,-3.75) , p<.001 Sedentary behavior CG: 36% IG: 28% OR: 0.49 (.35,-.69), p<.001 After 4 years: BMI – 0,3 kg/m^2 At 4 years, 4.2% of the initially non-overweight adolescents were overweight in IG , 9.8% CG (odds ratio=0.41 (0.22; 0.75); P<0.01).	Objective measurement Height: stadiometer, Weight: Tanita TBF 310 Blood components: plasma, high density lipoprotein-cholesterol, triacylglycerols, insulin Subjective measurement Self-reported questionnaire for Physical activity: Time spent in front of TV Self-efficacy & intention towards PA	1

Title of CBI	Country	Level of execution/ setting	Sample characteristics	Instruments and activities	Design characteristics	Reported effects Reports	Type of measurement Objective/ subjective	Source
Copenhagen School Child Intervention Study	Denmark	City/ village level_school	Size CG: 415 (Ballerup community) IG: 291 (Taarnby community) Age: 6 to 7 years old	Legislation Professional training Social environment Action for parents Extra sport activities Personal advice Group education	Random sample selection: yes Comparison with another region: yes Follow up at 1 year (December 2001 baseline, May 2002 follow up)	The difference between intervention and control municipality in several parameters were small or non-existent after 3 years. Intervention-group showed a more favorable development in V02max over the 7 years compared to control. Positive development did not occur for the group of obese children, where we didn't see any difference between the intervention and control group.	Objective: Height: Harpender, stadiometer Weight: SECA electronic scale Skinfold: Harpenden skinfold calipet	1
The Be Active After-School Activity Programme	Ireland	Neighboorhood_school	Size (4 schools) CG: 165 IG: 149 Age 6 to 9 years old Mean (SD)=7.7 (.56)	Legislation Professional training Regulation Media attention Physical environment Social environment Service access Action for parents Working in groups on a project Cooking classes Extra sport activities Counseling Social activities Group education Education as a general tool	Random sample selection: yes (the whole population) Comparison with another region: yes Follow up after 9 months from baseline	Follow up measurement after 9 months from baseline The proportion of parents whose children participated in the Be Active ASAP that rated their child's physical activity levels as about the same, or greater than others the same age and gender increased from 82.5% at baseline to 88.6% at follow up (87.6% at retention). – The proportion of parents whose children participated in the Be Active ASAP that reported taking part in vigorous physical activity on no days in a week fell from 20.4% at baseline to 17.3% at follow up and 17% at retention.	Objective: a pedometer was used to assess anthropometric data (e.g. weight and height), indicated in a self-report questionnaire Subjective: self-reported data on bahvioral and physical activity level	2

Title of CBI	Country	Level of execution/ setting	Sample characteristics	Instruments and activities	Design characteristics	Reported effects Reports	Type of measurement Objective/ subjective	Source
On The Move-Haarlemmermeer	The Netherlands	Neighborhood	Size IG: 238 children (6 schools)CG: 63 children (1 school) Age: IG:9-11 years old CG: 4 to 12 years old	Incentives Professional training Physical environmentService accessAction for parentsMedia attention Working in groups on a project Cooking classesExtra sport activitiesSocial activitiesPersonal adviceGroup educationEducation as general tool	Random sample selection: no Comparison with another region: yes Follow up after 1 year (2008-2009)	Doing sports at a club at least twice a week. Improvementes for IG from 80% (1st meeting) to 83% (2nd meeting), p<.001 No significant differences for attitudes towards healthy nutrition, support structures, healthy behavior, knowledge.	Subjective: self-reported questionnaire for attitudes towars health nutrition and in healthy behavior (e.g. eating vegetables and exercising)	2
Villa Vitality	UK	City level_sports facility	Size 21,000 Age 9 to 10 years	Working in groups on a project Cooking classes Extra sport activities Personal advice Group education Education as a general tool Physical environment Action for parents	Random sample selection: no Comparison with another region: no Follow up at 3 months from baseline	Follow up 2% of children reported eating fruit every day at baseline, increasing to 57% at follow up There was a significant increase of nearly half a day in the number of days per week children were taking part in sport comparing before and after.	Subjective: questionnaire	3
Childhood obesity program in Jönköping County Council,	Sweden	Neighborhood__other setting	Size of population 2004/2005 2005/2006 2006/2007 2007/2008 2008/2009 2009/2010 3362 3169 3310 3476 3570 3298 Age: 4 to 16 years old	Incentives Legislation Professional training Regulation Media attention Physical environment Socio environment Action for parents Treatment Working in groups on a project Cooking classes Extra sport activities Counseling/ therapy Social activities Sports club Personal advice Group education Education as a general tool	Sample selection: yes Comparison with another region: no Follow up data every year from 2004	Follow up 2004/2005 2005/2006 2006/2007 2007/2008 2008/2009 2009/2010 6.5 year old Overweight (%) 13,6 11,7 12,4 12,2 12,8 14,7 Obesity (%) 4,6 4,3 3,7 3,7 4,0 4,5 Conclusion: since the program has started the prevalence went down and then up again suggesting an initial positive effect	Objective: results assessed through standardized procedures	2 and soon 1

Title of CBI	Country	Level of execution/ setting	Sample characteristics	Instruments and activities	Design characteristics	Reported effects Reports	Type of measurement Objective/ subjective	Source
Educación para la Salud frente a la Obesdiad Infantil Juvenil en Extremadura	Spain	Neighborhood_school	Size Total: 29187 (he Autonomous Community of Extremadura) Age: 7 to 14 y	Group education Modification of physical environment Modification of social environment Actions targeted at parents Counseling Cooking classes Extra sport activities Exercise TV Education about healthy lifestyle Personal advice	Sample selection: yes Comparison with another region: no Follow up data at 6 years (program started in 2005 and will end in 2011)	Children eat more healthy , are doing more PA families make healthier diet and exercise	Self reported (e.g. questionanire)	2
Program Nutrition, Prevention and Health among children and teenagers in the Aquitaine region (south west France)	France	Neighborhood_School	Size of population: 19 highschools and 7 colleges Age> 14 y	Physical environment Action for parents Working in groups on a project Extra sport activities	Sample selection: yes Comparison with another region: no Follow up data at 6 years (baseline 2004/2005 and follow up 2007/2008)	Start of intervention (1004/ 2005) and follow up (2007/2008) 57.9% of teachers organized a morning snack in 2007-2008, versus 68.7% in 2004-2005. The proportion of teachers reporting children having snacks in their schoolbag decreased from 34% in 2004-2005 to 19% in 2007-2008.	Subjective: interviews, observations and a questionnaire addressed to children	1
Delta Project for the Nutritional Education, Physical activity and Obesity Prevention	Spain	City _school	Size: 200 000 Age: 6 to 16	LegislationProfessional training Regulation Media attentionPhysical environmentSocio environmentAction for parentsWorking in groups on a project Cooking classesExtra sport activitiesCounseling/ therapy Social activitiesSports clubPersonal adviceGroup educationEducation as a general tool	Random sample selection: n.a. Comparison with another region: n.a. Follow up: evaluations are continous started from 2005 till 2011	Follow up (2009) Improvement in feeding habits of Canarian population compares to ESC Excess in body weight less	Subjective: opinion questionnaire	2

Title of CBI	Country	Level of execution/ setting	Sample characteristics	Instruments and activities	Design characteristics	Reported effects Reports	Type of measurement Objective/ subjective	Source
Gezond gewicht Overvecht (GO)	The Netherlands	Neighborhood_school	Size 34.000+ inhabitants in the neighbourhood (0-99) Age: 4 to 12	Group education Working in groups on a project Modification of physical environment Modification of social environment Actions targeted at parents Extra sport activities Education about healthy lifestyle Personal advice	Random sample selection: yes Comparison with another region: no Follow u: evaluations are continous started from 2005 till 2011	Follow up Overweight 26% (2004-2005) to 20% (2008-2009) 'little breakfast'(OR = 0,77 [0,69-0,86]), 'few fruit consumption'(OR = 0,77 [0,68-0,89]), 'watching lot's of tv'(OR = 0,79 [0,72-0,85]),' little physical activity'(OR = 0,81 [0,74-0,88]) and 'no membership to a sports club'(OR = 0,91 [0,84-0,98]). OR is Odd's ratio.	Result from Periodic health research (PGO in dutch). Reported for anthropometric measures (done by a PE) Self reported for life style factors (e.g. questionnaire)	2
Integrated Obesity Care Pathway - A Whole Systems Approach	UK	City	Size 548 Age: 7 to 17 years old	Professional training Media attention Socio environment Service access Action for parents Social activities Sports club Personal advice Group education Education as a general tool	Random sample selection: yes Comparison with another region: no Follow up after 1 year	Carnegie Clubs (n=48) Baseline: Mean (SD) Body mass (kg/ m2):32.3 ± 5.0 BMI SDS% : 3.2 ± 0.4 Body fat: 42.0 ± 7.2 Waist (cm): 100.78 ± 16.4 Follow up (at 12 months) Body mass (kg/ m2): 31.4 ± 5.5 BMI SDS% :3.0 ± 0.6 % Body fat : 40.8 ± 8.1 Waist (cm): 97.3 ± 15.7 Change basline to follow up: BMI (kg.m-2): -0.9 ± 1.0** BMI SDS: -0.2 ± 0.2** % Body fat: -1 -3.48 ± 6.57** Waist (cm): .2 ± 3.1* 75% reduce BMI SDS Participants in the cohort: 0.16 reduction in BMI SDS (Pre BMI SDS, 2.71 vs Post BMI SDS, 2.55, n=538 children) · 90% of completers achieved a reduction in BMI SDS 2% reduction in % body fat · Stable body mass 15% improvement in fitness · 10% increase in global self-worth · Parents attending the course with their children also benefited and evidenced a	Objective: standardized procedures (e.g. Tanita scale)	1

Title of CBI	Country	Level of execution/ setting	Sample characteristics	Instruments and activities	Design characteristics	Reported effects Reports	Type of measurement Objective/ subjective	Source
						significant reduction in body mass, an average 0.31 kg.m-2 reduction in BMI, 5cm reduction in waist circumference and 10% improvement in level of fitness		
Healthy Children (Friska barn)	Sweden	Neighborhood_nursery kindergarten	Size : 1327 Age : 2-5 years	Professional training Physical environment Action for parents Working in groups on a project	Random sample selection: n.a. Comparison with another region: no Follow up performed directly after 1 year from baseline: 2008, follow up 2009	Follow up (2009) Time spent outdoor has dobled (non structured PA)	Subjective: self reported questionnaire filled in by children	3
Alive 'N' Kicking	UK	Neighborhood_ School level, leisure centre, other community settings	Size + Age 4-6 (n=57) 7-11 (n=158) 12-15 (n=58)	Incentives Professional training Physical environment Social environment Service access Action for parents Working in groups on a project Cooking classes Extra sport activities Social activities Sports club Personal advice Group education Education as a general tool	Random sample selection: yes Comparison with another region: n.a. Follow up after 12 weeks from baseline	Difference in mean BMI -0,3 to -0,8 kg/m^2 . Difference in mean waist circumference -2,0 to -5,4 cm	Subjective: self-reported on nutritional intake- family lifestyle- daily activity (hours), daily sedentary activity (hours), self esteem; readiness to change Objective: data on height, weight, height, waist circumference, physical activity level (e.g. shutle run test, scales, tape measures)	2
Fun 4 Life	UK	Neighborhood_Clinic	Size: 63 children Age 8 to 16 years old	Social environment Service access Action for parents Extra sport activities Social activities Sports club Personal advice Group education Education as a general tool	Random sample selection: yes Comparison with another region: no Follow up: at 3 months after the end of the program	End of intervention at 3 months Mean body weight -0.3 kg; mean BMI -0,5 kg/m^2	Objective: BMI (e.g. Tanita scale) Subjective: questionnaire filled in by respondents	3

Title of CBI	Country	Level of execution/ setting	Sample characteristics	Instruments and activities	Design characteristics	Reported effects Reports	Type of measurement Objective/ subjective	Source
B.Slim Beweeg meer.eet gezond. Assessment of the component Overbruggingsplan	The Netherlands	Neighborhood_Youth health care	Size: 271 Age 1 to 15 years	Professional training Action for parents Working in groups on a project Cooking classes Personal advice Group education Education as a general tool	Random sample selection: yes Comparison with another region: n.a. Follow up at 1 month and 7 months from baseline	Follow up 7 months (2007/ 2008) BMI decreased or remained unchanged in 85 % of the cases Waist circumference: 82.3 vs 78.1 (at the end of intervention) Healthier eating: 80% vs 52% (at the begining of intervention) Sugary drinks: 89 vs 48 (at the begining of intervention Physical activity level: 72% vs 44 (at the begining of intervention) TV & computing viewing: 64 vs 51 (at the begining of intervention)	Objective: waist circumference, weight & height Subjective: dietary & exercise (e.g. questionnaire fileld in by parents)	2
Movi program	Sweden	School	Size CG: 546 (10 schools) IG: 375 (10 schools) Age: n.a.	Modification of physical environment Modification of social environment Actions targeted at parents Extra sport activities Education about healthy lifestyle Personal advice	Random sample selection: yes Comparison with another region: yes	% of overweight obesity after 2 years intervention vs control 0.55 (0.39, 0.78): female TST after 1 year -1.61 (-2.45, -0.78): female -1.29 (-1.79, -0.79): male	Objective: automatic digital device for weight, percent body fat and blood pressure	3

Title of CBI	Country	Level of execution/ setting	Sample characteristics	Instruments and activities	Design characteristics	Reported effects Reports	Type of measurement Objective/ subjective	Source
CHILDREN Study	Greece	School	Size of population CG: 325 (13 schools from Ioannina Metropolitan Area) IG: 321 (13 schools from Ioannina Metropolitan Area) Age CG:10.25 (.44) IG: 10.29 (.44)	Group education Working in groups on a project Changes in physical environment Changes in social environment Action for parents Cooking classes Education as a general tool	Sample selection: yes Comparison with another region: yes Follow up data from Jan 2005 to Jan 2006	Changes in mean (95% CI) Baseline: Physical Activity indices Control 47.7 (41.9) Intervention 41.1 (36.6) Fruit Intake (exchanges) Control 1.3 (1.5) Intervention 1.1 (1.2) Sweets and Beverages Intake (exchanges) Control 2.6 (2.7) Intervention 2.5 (2.2) Follow up measurement Physical activity CG: -16.4 (-21.1, -11.7) IG: 2.2 (-2.6, 7.1), p=.041 Fruit intake CG: -0.2.(-0.4., 0.1) IG: 0.4(0.1, 0.7), p=.044 Sweets and beverages intake CG: 0.2 (-0.2, 0.6) IG: -0.8 (-1.3, -0.4), p= .039 BMI z score CG: 0.1 (-0.03, 0.2) IG: -1.1 (-1.2, -0.9), p=.047	Objective: anthropometric measures assessed with digital device (e.g. Seca Personal Floor Scale) Self reported for dietary and physical activity assessment (standardized questionnaire)	1
Lebenslust - Leibeslust Ernährungsbildung und Prävention von Essstörungen in Kindergarten und Schule	Germany	School	Size appr. 440 children from kindergarten Age 3- 6 years old and	Working in groups on a project Cooking classes Social activities Professional training Regulation Socio environment Service access Action for parents	Random sample selection: no Comparison with another region: no Follow up since 2004	Follow up measurement Children from kindergarten are more open to try new, unknown food, have learned to distinguish between healthy & unhealthy food	Subjective: data reported by kindergarten teachers (e.g. questionnaire)	2
Keep Fit	Poland	School	Size N=1200Age: 12 to 17	Group educationWorking in groups on a projectModification of physical environmentActions targeted at parentsCooking classesExtra sport activitiesEducation about healthy lifestylePersonal advice	Random sample selection: no Comparison with another region: no	Follow up measurement96% participate in physical activity		

Title of CBI	Country	Level of execution/ setting	Sample characteristics	Instruments and activities	Design characteristics	Reported effects Reports	Type of measurement Objective/ subjective	Source
Life in motion	Sweeden	School	Size: 123 preschools and 70 schools)	Extra sport activities Sports club Group education Education as a general tool Nutrition Physical activity	Random sample selection: yes Comparison with another region: no Follow up pre and post measurement (2006-2008)	Follow up measurement Increased knowledge about physical activity and nutrition. Better strategy about how to work with nutrition and physical activity. The girls has increased physical activity.	Subjective: self-reported questionnaire	3
MEND	UK	Othe r ype of local community_ other setting	Size CG: 60 IG: 58 Age CG: 10.2 (1.3) IG: 10.3 (1.3)	Professional training Physical environment Social environment Sports club Cooking classes Social activities Sports club Personal advice Group education Education as a general tool	Random sample selection: no Comparison with another region: no Follow up at 6 and 12 months fro,m baseline	Follow up (6months): BMI (kg/ m-2): CG: 27.7 (5.2) IG: 25.7 (3.3) Physical activity (h/week): CG: 11.0 (7.8); IG: 14.2 (8.2) Sedentary activity (h/week): CG: 21.7 (9.2) IG: 15.9 (7.2) Differences (adjusted for baseline) Mean BMI (Kg/m): -1.2 (-1.8 to -0.6), p <.0001 Physical activity level: 3.9 (0.1 to 7.8), p=.04 Sedentary inactivity: -5.1 (-9.0 to -1.1), p=.01	Objective: body weigt, anthropometry assessed through standardized procedures Subjective:physical activity and inactivity (e.g. questionnaire administered to parents and children)	1

LEGEND source of documentation: 1= academic journal; 2= gray literature and accessible on internet; 3= gray literature not accessible on internet or E-mail;

ANNEX 13 -
List of CBIs: settings and age range of children targeted

Legend:

Setting 1 : the main setting (as reported by the CBI contactpersons)

Setting 2-4: additional settings

1= Neighbourhood in general
2= Health care centers
3= Sports facility
4= School
5= Nursery/kindergarten
6= Other setting

The last five columns indicate whether the following settings were <u>one of the</u> settings of the CBI (indicated by an *):

N= Neighbourhood in general
HCC= Health care center
SPF= Sport facility
S= School
N/KG= Nursery/kindergarten

Age range / settings → ↓Country/project	**CBI?** [1]	**Specific age range**		**Setting 1 (main setting)**	**Setting 2**	**Setting 3**	**Setting 4**	**N**	**HCC**	**SPF**	**S**	**N/KG**
Belgium												
Viasano (EPODE)		5-12		1	4	3	2	*	*	*	*	
Zahnhygiene		5-8		4	2				*		*	
Youth care		6-18		2					*			

Age range / settings → ↓Country/project	CBI? [1]	Specific age range		Setting 1 (main setting)	Setting 2	Setting 3	Setting 4	N	HCC	SPF	S	N/KG
Czech Republic												
Little pyramid	X	3-7		5	6							*
Denmark												
Copenhagen project		6-10		4							*	
Diet in a nutshell		0-18		4	5	3	1	*		*	*	*
France												
ICAPS		6-16		4	1			*			*	
EPODE		5-12		1	5	4	3	*		*	*	*
Aquitaine region	X	3-18		4	3	2			*	*	*	
Arnaud / plan obesite		0-18		1	2	3	4	*	*	*	*	
Germany												
besser essen …		-		4	5	1	3	*		*	*	*
Lebenslust		-		5	3	6	4			*	*	*
Kita vital		2-6		5								*
TAFF		4-17		6								
Crescnet	X	0-18		2	6				*			
Greece												
PAIDEIATROFI		0-12		1	2	3	4	*	*	*	*	
Children study		10		4	6						*	
Hungary												
Ecoschool		6-18		4	6						*	
Happy		7-14		4	5						*	*
Go healthy		3-6		5	1	6		*				*

Age range / settings → ↓Country/project	CBI? [1]	Specific age range		Setting 1 (main setting)	Setting 2	Setting 3	Setting 4	N	HCC	SPF	S	N/KG
Iceland												
6H		6-16		4							*	
everything affects us-		6-16		1	2	4	5	*	*		*	*
Ireland												
Action for life		4-12		4							*	
The Be Active After-		7-8		4							*	
Fresh fruit schools		5-13		4							*	
Cook it		15-16		4							*	
Latvia												
European healthy	X	-		3	1			*		*		
Netherlands												
fam lekkerbek		4-19		1				*				
Samengezond		0-19		1	4	2		*	*		*	
Gez. gew. overvecht		0-19		4	5	1		*			*	*
On the move		4-12		4							*	
Lekker in je vel		8-12		6								
Gezondheidsrace		0-18		1	3	4		*		*	*	
Wijkgezond Zeist		0-18		1	4	5	3	*		*	*	*
Social activation strat		4-16		1	4			*			*	
Gezonde slagkracht		0-18		1	4	3	2	*	*	*	*	
B-fit		0-18		4	5	2	3		*	*	*	*
B-slim beweeg	X	0-18		1				*				
Slagkracht		0-18		4	3	2	5		*	*	*	*

Age range / settings → ↓Country/project	**CBI?** [1]	**Specific age range**		**Setting 1 (main setting)**	**Setting 2**	**Setting 3**	**Setting 4**	**N**	**HCC**	**SPF**	**S**	**N/KG**
Raalte gezond		0-18		4	6						*	
sCoolsport		6-18		4	3	2	5		*	*	*	*
Poland												
National program		-		4							*	
Keep fit		11-15		4							*	
Romania												
Increase access		3-18		2	4	5			*		*	*
SETS		0-12		4	3					*	*	
Spain												
Educacion par		5-14		4	2	1		*	*		*	
Integral plan		1-18		1	4	5	2	*	*		*	*
THAO		0-12		4	5	1	2	*	*		*	*
Molina de Segura		1-16		4	5	1	2	*	*		*	*
Delta		6-16		4	1	2	3	*	*	*	*	
PAIDO		6-16		2	3	1		*	*	*		
Program for s		3-12		4	5						*	*
Moviprogram		9-13		4							*	
Projecte (POIBA)		8-10		4	3					*	*	
Prevention escolar		4-12		4	6						*	
Move with us		6-12		3						*		
Prevention and		6-14		2	4	5	1	*	*		*	*
Sweden												
Linda frank/jönköpiong		0-18		1	2	5		*	*			*

Age range / settings → ↓Country/project	CBI? [1]	Specific age range		Setting 1 (main setting)	Setting 2	Setting 3	Setting 4	N	HCC	SPF	S	N/KG
Child health / salut		0-18		2	4	5	6		*		*	*
Parental support		6		4	6						*	
Health equilibrium		-		1	4	2	5	*	*		*	*
Friska barn		1-5		5								*
Scip school	X	6-16		4	1			*			*	
Family weight	X	12-18		2					*			
Life in motion	X	1-15		4							*	
Switzerland												
Prevention project		0-3		2	5				*			*
Migus Balou		0-5		2					*			
United Kingdom												
NHS Dudley		7-13		3						*		
Villa vitality		9-10		3	4					*	*	
Alive and Kicking		0-19		3	4	5				*	*	*
Fun4life		8-16		1	3	4		*		*	*	
On the go		8-16		3	4					*	*	
Integrated obesity Care Pathway		4-17		1	3			*		*		
Active 8 com	X	11-18		3						*		
Appetite for life	X	5-18		4	3					*	*	
Food Life Partnership		4-18		4	1			*			*	
Five/60		8-10		4							*	
Fit4life		9-11		4							*	

Age range / settings → ↓Country/project	**CBI?** [1]	**Specific age range**		**Setting 1 (main setting)**	**Setting 2**	**Setting 3**	**Setting 4**	**N**	**HCC**	**SPF**	**S**	**N/KG**
Fun, food, fitness		5-11		1				*				
ncmp team	X	4-5+15-16		4	2				*		*	
Novel treatment	X	9-18		2					*			
MEND		2-13		1				*				
Family lifestyle (FLIC)		4-8+8-12		1	6			*				

[1] X = projects does not seem to be complying with all inclusion criteria to be considered as truly community based (see annex 4)