

## **Healthy Children in Sound Communities: a Euregional community setting project**

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### **Abstract**

In 2004, a comprehensive literature review on “young people’s lifestyles and sedentariness” was conducted on behalf of the EU-Sport unit, department of the commission “Education and Culture” (cf. Brettschneider & Naul 2004; Naul & Brettschneider 2005b). This resulted in a number of recommendations for combating the epidemic increase of overweight and obesity across Europe. One of these proposed a multisector network strategy at community level to promote an active lifestyle for young people according their various settings (home, school, sports club, and the physical environment of the community). This strategy implements a typical setting approach for physical education at school in conjunction with a range of extra-curricular physical activities within local communities.

To achieve more quality standards for active living, the promotion of physical activity has been supplemented by education and information campaigns about good eating habits for different target groups of children, and by further community-based policy-making about environmental developments.

However, the project “healthy children in sound communities” not only rests on a community-based network of settings, but also on the various departments of community administrations that promote an active lifestyle for young people.

The different partners in the local community network are also linked with other partners in communities in the cross-border regions of Germany, the Netherlands, Belgium and Luxembourg. These cross-border regions contain different “Euregios”, where not only German and Dutch municipalities, such as the cities of Velen and Winterswijk, but also Belgian, Dutch and Luxembourg communities actually begin to collaborate and to exchange

their different national experience about community-based networks of public healthcare programmes.

### **Prevalence of overweight and obesity in Europe**

The results of this EU-sponsored study (cf. Brettschneider & Naul 2004) focused on a set of lifestyle factors that lead to growing overweight and obesity in children and young people in all regions of Europe. Overweight and obesity are rampant all over Europe and the tendency is increasing. At present, the rate of prevalence is highest (BMI <25) in south European countries such as Malta, Greece, Italy and Spain and lowest (BMI >15) in east European countries (Czech Republic, Slovakia, Hungary) and the Baltic States (Estonia, Lithuania). In the “old” EU countries the number of children who are overweight has increased on an average by 8-10% over ten years, the highest increase in west European countries being documented for the UK (cf. Armstrong, 2004; Armstrong & Welsman, 1997).

New data reported for the UK in 2005 predicts a further increase up to 36% for the age group 5 to 9 by the year of 2008 unless further intervention strategies are established in the interim (Bayliss, 2005). The level of overweight and obesity among boys and girls has risen dramatically in pre-schoolers and primary schoolchildren since the year 2000. Currently, a number of different reference systems and methods of assessment are used in national and comparative European studies on obesity, and these lead to different findings for these countries and regions. Although some caution is necessary when dealing with data sets of percentage prevalence, the overall development of overweight and obesity has become a serious and universal epidemic problem for young Europeans. The “metabolic syndrome” involving cardiovascular diseases and type 2 diabetes – formerly more likely to affect older people – has become increasingly common among younger people (Brettschneider, Naul, 2005a).

An overweight child is highly likely to still be overweight and susceptible to illness as an adult. Snacks, fast food and sweet drinks are popular among young people, while healthy foods such as fruit and vegetables are often ignored. Consumption habits did not agree with national nutrition recommendations. Despite unfavourable distribution of food, the total energetic intake has not increased over the last years in each EU country (e.g. the Netherlands and Germany), although there are national divergences across Europe.

In Europe, time spent watching television varies considerably, both by children aged 3-13 (between 90 and 120 minutes per day) and by young people aged 14-19 (between 120 and 180 minutes per day). On weekdays about two thirds of European adolescents spent between 4 and 5 hours in front of the television. While television consumption is largely stagnating in “old” EU countries, expansion rates in the newly acceded EU countries are enormous. In addition, the use of computers is increasing everywhere. At present, about 15% of adolescents in Europe spend more than 3 hours per day at the computer; at weekends the proportion of computer freaks goes up to a quarter, with even stronger tendencies in EU countries with a higher BIP.

European sports clubs have been reporting static participation rates for a number of years. The degree of organisation for children and youth in Western European and Scandinavian countries lies between 50-70%; in Eastern European countries the level of involvement in organised club sports is somewhat lower (30-50%) but still growing. Nevertheless, this high level of engagement in organised sports is not able to overcome the increasing inactivity in daily life, e.g. increased motorised transportation, decline of school PE, range and amount of sedentary leisure activities.

In summary, there are three reasons for dealing with overweight in children: overweight is an independent risk factor for CVD; it is associated with clustered risk factors (metabolic

syndrome); and the risk factors track (the likelihood that fat children will become fat adults is high). Overweight is understood as an un-decoded interplay of genetic predisposition, poor eating habits, increased media consumption and lack of physical activity (sedentariness). Among those variables causing overweight and obesity to increase rapidly within the last 10 to 15 years in European countries, the rise of physical inactivity and sedentary behaviour patterns play a key role. In fact, the ratio of calorie intake to calorie expenditure has become inadequate on a growing scale.

### **How to counteract overweight and sedentary lifestyles?**

With regard to the three main factors: unhealthy nutrition habits, increased passive media consumption and less allocated time for daily physical activity any programme which will counteract overweight and sedentary lifestyle concepts must address at least these three factors as parts of a comprehensive programme for intervention. A broad catalogue of preventive activities which should comprise short-term and medium-term as well as long-term measures is needed. All children's and young people's environmental settings must be included as essential parts of a *common community network*. However, community-based interventions should and must be supported by other promotion activities at regional and federal level.

Besides cognitive education, we must also promote psycho-mental self-acceptance for an active lifestyle both within and outside regular lessons and social interactions at school. Alongside this we recommend organising multimedia information campaigns about the interrelation between nutrition, sedentariness, media consumption and passive leisure time activities for different target groups (e.g. parents, teachers, pupils) as well as comprehensive instruction at school with an accent on health promotion.

For the *common community network*, school-based physical activities should be linked with other social environments to cover all those settings of children and adolescents that play an important role in young people’s everyday life: their parents’ house, their school, sports and youth clubs, living environment and the community. Besides cognitive education about the risks and consequences of sedentariness we especially need to address the emotional areas of adolescence in order to achieve self-acceptance coupled with a desire for a changed active lifestyle, i.e. with a healthy nutritional attitude, creative use of media and intensive sporting activity. It is also necessary to factor in environmental variables such as criteria for urban development and for movement spaces within urban development.

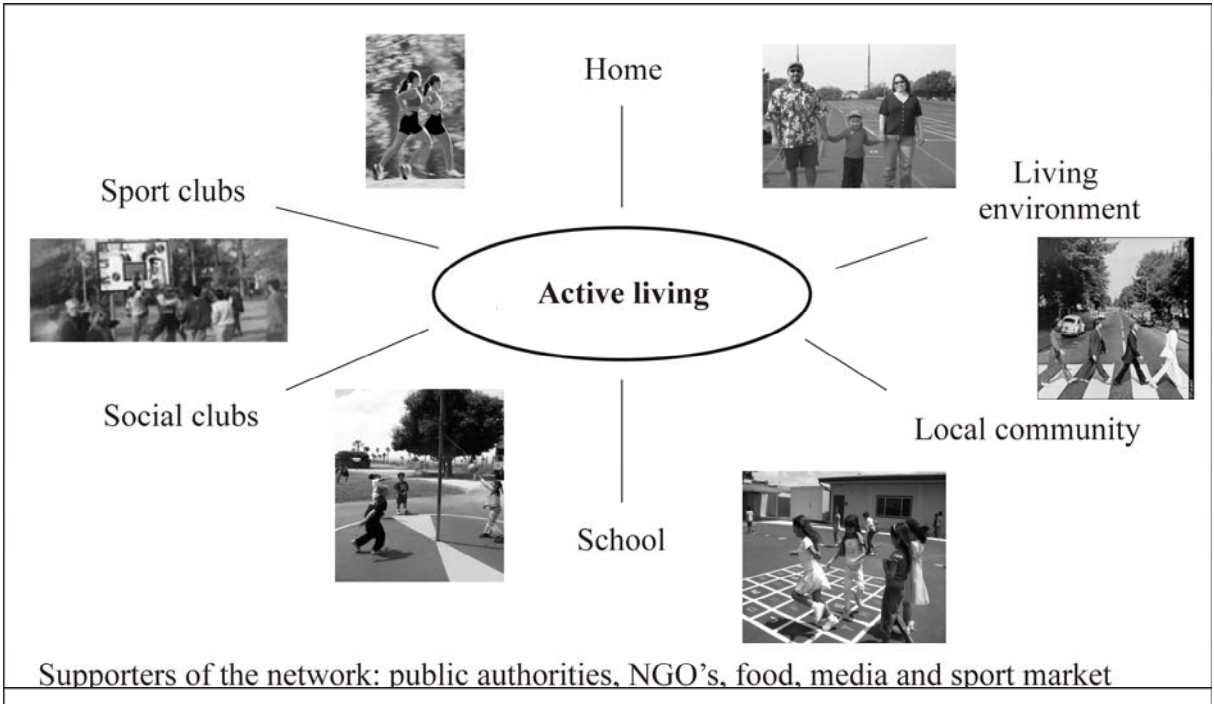


Figure 1: Network strategy of cultural settings for active living

The network strategy is a concept for communal projects which could be used as an applied model for EU communities. Regardless of cultural and national peculiarities, this strategy links young people’s living, education and intervention settings, which do need to be linked in

order to reap the benefits of a comprehensive local intervention strategy. However, cultural traditions, different national school systems, different childcare practises and different developments in communities' infrastructures should also be recognised. Cross-border communication and cooperation will therefore exchange national knowledge and experience between EU-communities, in what way and to what extent the network will be developed in different EU regions, what kind of problems does this networking encounter and how are they managed by European citizens.

As a first step in this cross-border direction, "twin cities" and other local communities on the former German-Dutch-Belgian-Luxembourg border were invited to join this project and all wanted to become partners in the project. Communities in these cross-border districts are members of different "Euregios" that have existed since the 1970s, in which cultural exchange programmes between schools, sports clubs and other groups of citizens already have a bilateral record (cf. Naul & Hoffmann 2003).

The target of the project is to involve at least 2 communities from each side of the border in the each of four countries. The municipalities of Velen (Germany) and Winterswijk (the Netherlands) have already become partners in this project as members of the first established "Euregio" at the Dutch-German border. Other municipalities which intend to join and extend the Euregio-community network for this project are the community of Burg Reuland (Belgium) and Wiltz (Luxembourg) in order.

### **The internal and external structure of a community-based network**

A network strategy that will link the community settings to promote "active living" for children and youth in order to counteract obesity and physical inactivity needs both an internal and an external structure. The internal structure of the community network needs

external support because (in Germany, for instance) the local education, health and sport systems are more and less part of the district and regional system that, to a certain extent, exerts a political, governmental and financial influence on the development and structure of education, health, and sport in local communities. The local network needs horizontal links between schools and sports clubs, and these both need stronger links to the relevant departments of the community administration offices (local school administration office, local community sports office, or whichever other office is responsible for the development and management of community-owned sports facilities). All three partners (schools, sports club, and community offices) need external links to their respective partners at district and state level, right up to the level of ministries and the non-governmental state sports federation. Figure 2 outlines the “map” of the internal and external structure of a community-based network for the municipality of Velen in Germany.

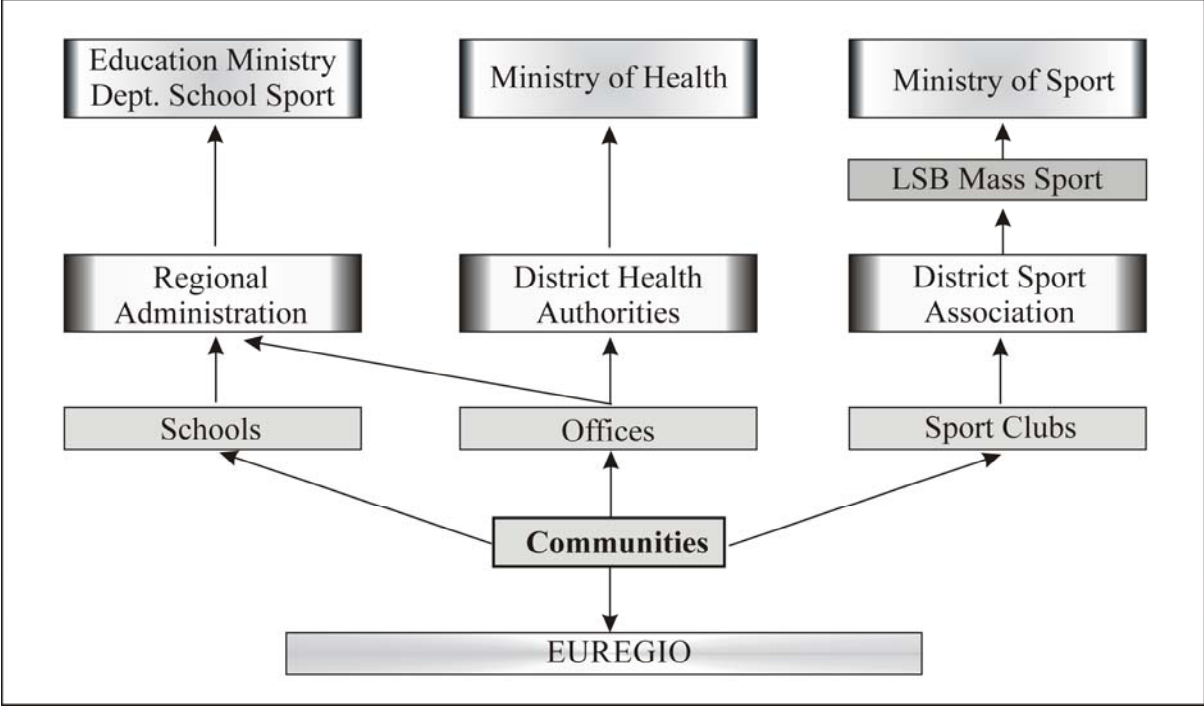


Fig 2: “Map” of the internal and external structure of a community-based network

The bottom line shows the three main local partners of the community network, which need help and support for their activities from the regional school administration, the district health authority, the district sports club association (in German: KreisSportBund) and the state sports federation (in German: LandesSportbund). At top level are the departments of the three ministries – education (incorporating school-based physical education), health and sports – which should be aware of these common efforts and should support this new “bottom-up strategy” at inter-ministry level to counteract the increase of obesity and sedentariness in young people.

However, the local network of the partners in a community, the “round table of partners” or the “front office” of the local project also needs help and support from other external partners that serve as the “back office”. Other partners are of course the cross-border communities of the Euregio region (for Velen this is the town of Winterswijk), the Euregio administration office, and the European Academy of Sport (EAdS), based in Velen, which serves as a link between the “front office” of the local network and the Euregio office. For the communities and their networks in Germany and the Netherlands, the “Dutch Institute for Movement and Sport (NISB) and our “Willibald Gebhardt Institute” (WGI) at Essen serve as “back offices”, as mediators to improve communication between the partners, to give advice and support to the local network as and when requested, and to manage and monitor the local network projects of the cross-border communities. Another task is to inform EU-commissions about the development and progress of this Euregio initiative as an implementation of previous recommendations made by the EU-research review study (cf. Brettschneider & Naul 2004) to transfer experience of community network projects on enhanced active lifestyles of young people to other EU countries.

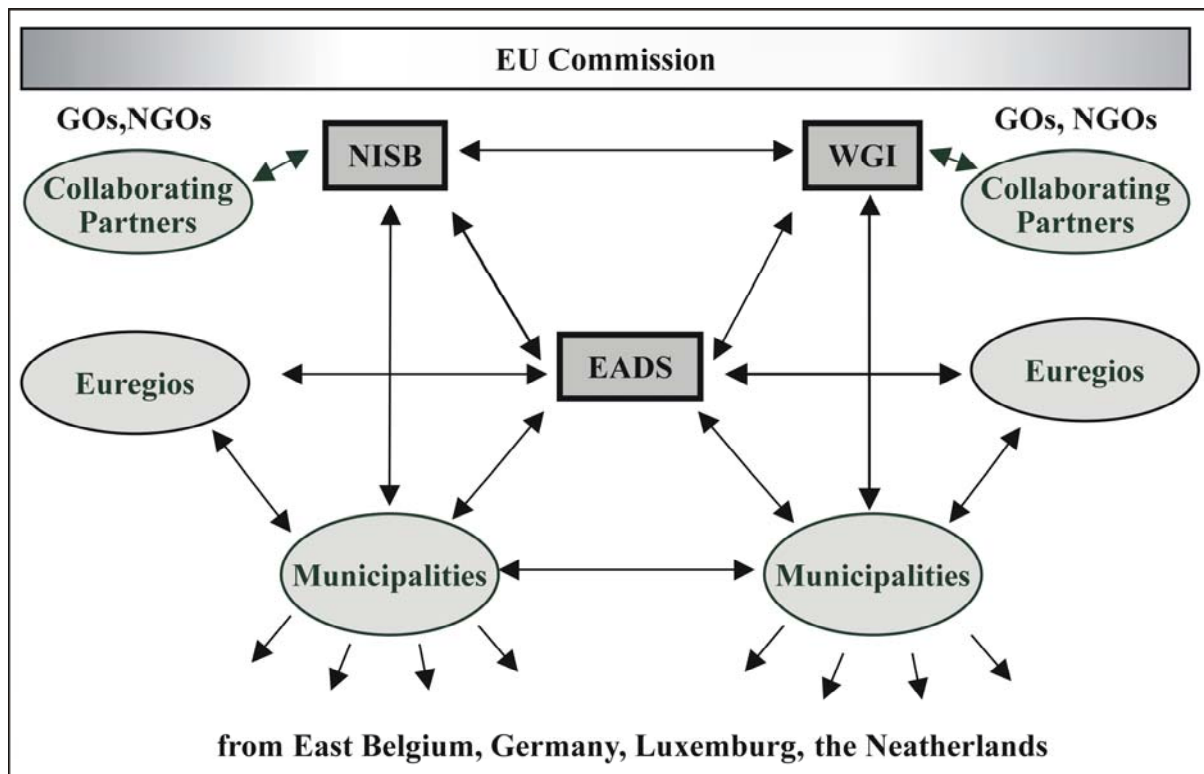


Fig. 3: The cross-border network

### The intervention programme for “healthy children in sound communities”

The intervention programme is divided into five parts with a total time allocation of 48 months (January 2006 to December 2009). *Preparation* (part one) started in January 2006 and runs until June 2006. At two national conferences (at Papendaal in February 2006; at Velen in May 2006) representatives of invited communities from the four countries, officials from the different Euregio offices and sports organisations including staff members of the NISB and WGI met to discuss and to plan the project. The second part, *Planning*, began in July 2006 with selecting the partners and building community networks. The “internal” and “external” networks still have to be discussed and developed; targets have to be agreed upon and then be incorporated into a programme of actions and an implementation plan. All these preparation and planning activities are currently still underway and in progress. The third part, the *Implementation* of the intervention programme for “healthy children and sound

communities”, will start in January 2007 and run for about two years (December 2008), supplemented by the fourth part, *Evaluation*, over the same period. Finally, in 2009, the fifth part of the project will start, *Documentation*, which will include a final report, a handbook of best practise and a final conference to communicate the results and recommendations to all partners and institutions at all of the levels involved in the strategy and programme of the complete network (cf. Naul & Hoffmann 2006).

### **The local community network of Velen in progress: preparation and planning**

Local meetings of representatives of schools, sports clubs, and officials of community offices started early in 2006. Delegates of all groups were present at the two initial conferences. Some support in explaining the purpose and the proposed internal and external structure of the local network was given by the “back office” WGI in March 2006 when the local partners started their *preparations* for a common network with the personal support of the lord mayor of the community. A steering group was set up to serve as “front office”, with representatives of all the partner institutions: an official from the administration offices, next in rank below the lord mayor: a district school doctor; two principals of primary schools that want to participate in the programme; one representative of a parents’ group; the president of the largest local sports club; the manager of a private rehabilitation centre; one scientist from the WGI. The first and important decision of the “front office” was to address the intervention programme not only to obese children and their parents but to all primary schoolchildren and their parents, because of the need to improve the physical skills of all schoolchildren and to improve their daily physical activity inside and outside schools.

## Preparation

The members of the steering group agreed on how to communicate the idea and structure of the network and intention of the project. It was decided to organise special conferences for teachers and parents, and to write to other partners in the community inviting them to join the network. It was further decided to involve kindergartens as another partner in the network, being the “origin” of the primary schoolchildren. In addition, public relations campaigns were set up for the project and the local newspaper and radio station were contacted.

As the next step, the group discussed which partners should be persuaded to participate in the local network project and in the planning of activities for local intervention programme:

Volunteers and licensed coaches from sports clubs (TuS Velen; VfL Ramsdorf); educators and teachers from kindergartens and primary schools; parents; district school doctors; local businessmen from pharmacies, drugstores and shops where children buy soft drinks, sweets and food (bakers), likewise nutritionists and dieticians from the rehabilitation centre. Other local groups where young people are active – such as “rural youth groups”, “Kolping youth groups”, etc. – should also be asked to participate. Summer camps and “holiday-based youth activities” were also proposed as further parts of the intervention programme. Members of the network group also asked the representative of the community administration to invite comparable representatives of the town of Winterswijk for contact meetings.

## Planning

The network programme of the municipality of Velen addresses the main factors that cause overweight and obesity in young people. The programme, which is still in progress, is divided into three areas of intervention, each aimed at tackling a major part of the problem and giving answers to these three questions:

1. How to increase the physical activity of every young child, not only for obese children?

2. How to avoid bad eating habits and related risk factors?
3. How to improve physical activities by means of better environments?

1. How to increase physical activity?

- 1.1 Before and after school lessons: Programme: “Walking cart” to kindergarten and school;  
Partners: Parents / Educators / Teachers.

“Walking cart” means that students walk to school on safe pathways which include identified “stations” in their living areas at which they join the walking group. Some of the students are responsible for pulling a cart from one station to another so that their satchels, rucksacks, sports bags, etc., can be carried by this cart during the walk to school.

- 1.2 At school: Curricular and extracurricular interventions

Curricular

- a) “One basic motor learning lesson per week for all in PE lessons”; Partners: educators / PE teachers

Basic motor abilities should be developed in PA and games, particularly coordination, flexibility and strength, using a variety of materials and sports equipment outdoors and indoors.

- b) “One remedial PE lesson per week for different groups”; Partners: educators, PE teachers, physiotherapists, movement experts

Special offers for currently handicapped and decelerated students in PA (variety of mixed lessons for motor learning and playing skills)

- c) “One basic games lesson per week for all”; Partners: PE teachers, coaches

Basic skills and strategies (pass and receive, give and go, etc.) for playing with balls of various kinds, sizes and materials, different tasks and rules of play, various target areas to score, different racquets, etc.

Extracurricular: breaks, events.

### 1.3 PA activities after school, e.g. in sports clubs.

A flexible course system for special target groups to link the purposes of curricular and extracurricular activities at school with the respective courses offered by the sports clubs:

- children with decelerated vs. accelerated motor abilities
- children with handicapped motor performance
- children with overweight and obesity
- children with deficits in “eye-hand-foot coordination”, “space-time coordination”, etc.

Each semester the students will conduct a basic motor ability and fitness test and will receive a “learner” report (“In which health and fitness zone am I?”)

## 2. How to avoid bad eating habits and risk factors?

### 2.1 Information events and campaigns at kindergarten and school.

Educators/teachers/experts convey information on “good food”, “what children need to eat, what makes them fat, what are the risk factors for life?” to parents, parents and children; “parents’ cooking events” at kindergarten/school.

### 2.2 Checklist of “healthy foods” for the school kiosk.

Only foods with reduced fat and sugar are available.

### 2.3 Non-compulsory extracurricular lessons on “nutrition and cooking”

### 2.4 Compulsory lessons on “nutrition”, “preventive healthcare”, “cardio-vascular diseases” etc., in school subjects (e.g. biology) and within the school programme.

### 2.5 Meet the school doctor: the healthy school day (health office, school, sports club)

## 3. How to improve PA with better environments?

- 3.1 More safe and clean pathways (administration office/community planning office / school / sports club)
- 3.2 More suitable school yards and spaces in the living area for PA (games, skates, bikes etc.) (administration office, school board, local sports club association)
- 3.3 “Open sports grounds and gymnasia”: rallies, events, tournaments for everyone (administration office, schools, sports clubs)

## **Conclusion**

During the current *planning* phase of the project, the “front office” and “back office” are both active in further developing the internal and external structure of the network and in communicating with the partners how to prepare and provide the final programme for implementation.

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