

Members' programmes to prevent childhood obesity: 2008

Background

The growing importance of the childhood obesity issue means that this topic is becoming a strong focus of the advocacy activity of the World Heart Federation. 155 million children around the globe are overweight or obese, representing one in every ten children. Among those 155 million, 30-45 million are classified as obese. In every region, that number is on the rise due to an increase in unhealthy dietary patterns and a decrease in physical activity. Importantly, this epidemic is far from being restricted to developed countries, since it also affects developing countries, such as China, India, Mexico, Egypt and Brazil. In China, one child in every eight urban Chinese was overweight in 1997, and based on recent trends, this figure is likely to reach one in five urban children before 2010. Projections are indeed worrying: if the epidemic keeps on gaining ground at a similar rate as today, then over 46% of school-aged children will be overweight in the Americas by 2010; 41% of children in the Eastern Mediterranean region, 38% of children in the European region, 27% in the Western Pacific region and 22 % in South East Asia.

Summary of the World Heart Federation initiative

Healthy nutrition habits are set young. This is why the World Heart Federation has decided to put the spotlight on the children programmes run by its members that focus on healthy lifestyles, in an effort to spread good practices and inspire other members that could wish to put the same kind of projects in place.

- Over the past few months, the World Heart Federation has thus collected information on effective programmes among its members. The focus areas of the programmes are combating childhood obesity and the promotion of healthy diet and regular physical activity. The members have been selected through a questionnaire process, the results of which are attached.
- Discussions have also taken place with the International Obesity Task Force (IOTF) over the fact that there is very little solid evidence of the impact of such programmes on actual changes in BMI. IOTF will prepare an overview of systematic reviews on such programmes, including grey literature covering programmes/studies aimed at changing knowledge, attitudes and ultimately behaviour, but without having necessarily measured BMI or waist circumference.
- The next step will then be to convene a workshop with selected members and partners to share experiences and expertise on the issue of childhood obesity; review and provide training on successful initiatives, evaluation and sustainability criteria; and identify which members have the capacity to take these programmes further. This is tentatively planned for June 2008.
- Following the workshop, the World Heart Federation plans to develop toolkits, including best practices and evaluation methodology, and create a central resource centre for the membership.

Summary of programmes collected from members

The World Heart Federation gathered data from 15 countries. This enables us to provide a summary of what is done in the countries surveyed so that other members have the choice to draw from a variety of programmes and apply ideas that fit their own situation. The programmes presented below vary with regards to the age of children targeted, activities deployed to fight childhood obesity, type of activities put in place (scientific vs. pure awareness programmes), and the budget allocated to implement these projects. Yet, despite the diversity, all use schools as an integral part of their programmes, albeit to a different extent.

Australia

The National Heart Foundation of Australia runs several programmes throughout the country aimed at preventing and/or reducing childhood obesity. *Jump Rope for Heart* is a national programme that has been running for 25 years. A physical activity (mainly rope-jumping) programme, it aims to get children physically active, while raising funds for the Heart Foundation's work. Jump Rope for Heart is a school-based fundraising programme with a target of raising more than \$5 millions in 2008. Each year, the programme attracts over 400,000 school children in over 2,300 schools around the country, mainly primary school children (6-12 years) and some secondary students (13-15 years). Evaluation of the programme is performed with regards to the budget targets of the programme, although an evaluation conducted in 2004 focused on the health benefits of the project. This evaluation showed that 52% of teachers reported that children were rope skipping during most breaks in addition to the programme sessions, and 80% of teachers reported an improvement in children's fundamental movement skills while the programme was in progress (usually for a 3 to 10 weeks period).

Another national programme run by the Foundation is *the Eat Smart Play Smart* programme, which started in 1999 with funding ensured until 2008. The programme is aimed at out of school hours care, since about 250,000 children aged 5 to 12 attend out of school care programmes. The goal is to provide healthy food choices and a variety of activities in these environments. The target groups are thus the child-minders and the concerned children. The programme is funded by both internal funds from the Foundation (AUD 102,000) and external funds from partners (AUD 50,000). An evaluation is in progress and will be completed in October 2008, but preliminary results have shown that 25% of out of care facilities have received manuals to help them implement the programme, reaching about 50,000 children. Child minders already reported changes in practices, notably serving healthier food and offering increased physical activities.

Healthy Ideas for Young Hearts Resources is another national programme of the Heart Foundation. It started in 2006, with the aim of providing parents and child-minders of primary school children with resources to develop healthy eating and physical activity with their children. The programme is constructed around a booklet and a cookbook with healthy recipes, and focuses on children aged 5 to 12 and their carers. The evaluation is currently ongoing.

The Heart Foundation is also involved in the *Australian Capital Territory Early Childhood Active Play & Eating Well Project*. It is a 3-year project which started in 2007 and will end in 2010, with the goal of promoting healthy eating and physical activity in families of children from birth to 5 years of age. This is done specifically through training staff of the early childhood sector. Partners contribute to the amount of AUD 130,000 per year for

three years while AUD 70,000 are devoted to the project officer salary. An evaluation is planned, although it is too soon at this stage in the programme to have any results.

In the Northern Territory, the Foundation participates to the *Childhood Healthy Weight Project*, a 3-year project running from 2007 until 2009. The aim is to implement strategies across the Northern Territory that promote healthy weight amongst children aged 0 to 18 years, notably through supplying schools in the area with toolkits to support healthy nutrition and lifestyles. The annual budget for this programme amounts to AUD 95,000 per year and an impact evaluation is planned for 2009.

In Western Australia, *the Unplug and Play Campaign* is supported by the Heart Foundation. It started in 2008, and is an on-going campaign which aims to reduce sedentary behaviour among upper primary school aged children (10 to 12 years), through radio and print advertising, and brochure production and dissemination. The total budget for this programme so far is AUD 62,000, with bi-annual media bursts planned for 2008 and 2009. It is too soon in the programme to share any results.

The Northern Territory Outreach Project is another local programme of the Heart Foundation for children's healthy lifestyles. It is a pilot project that targets children in schools in low socioeconomic areas, and which tries to introduce basic skipping into the schools's curriculum. Targeted children are between 5 and 12 in rural and remote schools of the Northern Territory. Its budget amounts to AUD 27,000 (given by an external partner) and no formal evaluation is planned at this stage.



Belgium

The Belgian Heart League started its children's programme in 2006. It focuses on heart health and teenager wellbeing, and aims to involve parents and teachers too, by producing leaflets and toolkits. With a budget of 100,000 euros, it targets teenagers between 14 and 18 in secondary schools, which amounts to about 20,000 teenagers, and it is supported by the National Lottery, Sanofi, Braun, Columbus and Becel.

Activities include pictures dissemination and discussions about the pictures, train the trainer workshops, exhibitions, and a special website put in place to support the campaign. No evaluation has been planned so far due to financial constraints.

Brazil (not a member's programme)

The programme started in February 2008 and is set to end in December 2009. It consists in an evaluation of nutrition and physical activity interventions that will last for about two years with the aim of preventing and reducing childhood obesity in school-aged children in two Brazilian counties. The 80 children enrolled in the programme are aged 6 to 9 and their families are involved as well. The following data are gathered over the course of the project: nutritional status and body composition, food intake in public schools, physical activity levels, identification of risk factors for overweight and obesity; this is done through various techniques, such as blood samples, questionnaires, caloric cost tests, etc. Data collection is then followed by the intervention part (with allocation to groups) of the project. The programme benefits from various institutional and financial partners, and in particular is part of the International Atomic Energy Agency programme for the reduction of childhood obesity in Latin America and the Caribbean. Evaluation of the results is in progress.

Hong Kong

The Hong Kong College of Cardiology runs a Jump Rope for Heart programme to disseminate the heart health message to the young generation and encourage them to do regular exercise. The programme was launched in October 1999, with the support of the Education Bureau (EDB) and the Department of Health. The programme is composed of four parts: 1) teaching skills, with participating schools receiving teaching kits free of charge; 2) heart health education, with educational materials provided by the Department of Health 3) fundraising; and 4) Jump Off Day, the climax of the programme: having learnt a series of skipping skills, students have the opportunity to share their experience with others.

Indonesia

The Indonesia Heart Foundation also runs a Jump Rope for Heart school programme. The programme is being developed initially in Jakarta (2 schools from each district), with the plan to roll it out nationally. In the first stages the focus is on physical activity and tobacco. Diet is a real problem as few schools have canteens and the vast majority of parents give their children lunch money, with which they buy junk food from street hawkers.

India

The Cardiovascular Society of India has just launched in July 2008 a programme which aims to create awareness on issues related to childhood obesity. It targets children from 6 to 16 and their parents, with activities ranging from presentations in schools to obesity camps, BMI measurements and counseling services.

Iran

The programme is run by the Isfahan Cardiovascular Research Center and is called Isfahan Healthy Heart Programme-Heart Health Promotion from Childhood. It began with a baseline survey done during the period 2000-2001 and programme interventions have been running from 2001 to this day. It focuses on a population of about 2 million people living in two cities in Central Iran, with a specific target of children from 2 to 18 years, coming to a number of about 600,000 children. It also targets their parents, teachers,

related healthcare providers in schools, in health centres and in kindergartens. The goal of the programme is to improve lifestyle habits, knowledge and behaviour towards healthy nutrition and reduce the prevalence of risk factors for obesity and bad heart health. The programme is constructed around two approaches: one that targets the general population, with training of the children, their parents and other child-minders through healthy snacks distributed and buffets put in place in schools, physical activities in schools and parks, TV programmes, etc. The second approach focuses on high-risk individuals, with screening for CVD risk factors of children of parents with CVD, and children with a least one risk factor. Nurses are also trained to take care of patients at risk and for the establishment of risk clinics. The budget for this programme amounts to USD 15,000 and the project is run in partnership with other public institutions, the TV and the radio.

The evaluation of the programme has shown an increase in the knowledge of the population about the issues explored, a decrease in the mean waist circumference and in the total and LDL-cholesterol in children in the intervention community. These are so far unpublished data.

Japan

The Japanese Circulation Society is conducting a nation-wide survey and intervention targeted at children from 6 to 15, with an evaluation of vascular pathology in children with obesity and/or metabolic syndrome.

Mexico

The Mexican Society of Cardiology has launched a project which is still in its initial phase which consists of a survey of children's weight and eating habits. The second phase of the project will be to implement various actions to tackle the issue of children overweight and obesity and evaluate the effects of the intervention.

Netherlands

The children programme is run by Jump, the youth arm of the Netherlands Heart Foundation. Called Lekker Fit, it is a school-based prevention programme for 4 to 12 year olds, which started in 2007 and is meant to be re-conducted and expanded throughout the country. The programme is constructed around 8 lessons per year given in schools which cover the topics of healthy nutrition, active living, and healthy lifestyle choices, as well as fit-tests (waist, height, waist circumference, shuttle run test, motor skills). The Foundation also produces workbooks to be completed with parents, teachers' guides, and toolkits for schools and the general community. Today the programme covers 300 out of 8,500 primary schools, which means that 75,000 children are involved. The Foundation has set itself the target of reaching 1,000 schools for the 2010-2011 period. The budget for the programme was 200,000 euros in 2007, and 135,000 euros for the year 2008, and the programme is run with a partnership with an educational publisher and other public institutions. A first evaluation on the implementation phase of the programme has been recently completed (in Dutch) and an evaluation of the effects of the programme is currently in progress, with results available in December 2008.



Norway

The Norwegian Council on Cardiovascular Diseases runs a programme called Petter Puls which started in 2004 as a pilot project, and was re-conducted and extended to other counties in 2005 due to its success. The programme is not time limited. It is centered on the cartoon of Petter Puls, a heart figure – based on the British Heart Foundation’s cartoon Artie Beat - that teaches children about CVD and heart health, while a second part of the programme revolves around the “jump for a heart” competition. The project focuses on children between 9 and 11 and covers about 60,000 children for the cartoon part, and 90,000 children through the competition, with a budget of about 97,000 euros. The programme also involves parents through homework to be done as a family. Evaluation shows that the programme is very much appreciated by the students and teachers, with 89% teachers declaring using more time on teaching their students about health, and 69% parents involved in the home assignments.



Denmark

The oldest children programme run by the Danish Heart Foundation is Rumlerikkerne, which started in 2005. "Rumlerikkerne" is a children theater play for kids aged 3-6. The goal is to teach children that an active life style and healthy diet is an important investment for their future lives. The message is that the healthy choice is the fun choice. In 2008 the children's play has been played for 134 institutions. The play is performed in kindergartens all around Denmark, and in that way it may have an influence on the communities as well. The first play was financed by the Ministry of Health and private funds. The programme received US\$ 147 000 from the private Danish foundation called Tryg fonden to develop a new children play for older children (6-9 years old). This new performance is expected to start in January 2009.

In October 2008 the Danish Heart Foundation launched its "Get Moving" campaign. It is a fitness test for children aged 10-15 which has been developed in cooperation with a Danish professor in physical activity. The goal is to get all the elementary schools in Denmark to use the test, as well as to get the teachers to teach the children about the determinants of their own health. The Danish heart Foundation has also developed an educational toolkit for the teachers to use. Built around a partnership with the Board of Health and the Copenhagen Community, the programme is being financed by the Copenhagen community and The Danish Heart Foundation. In 2008 The Danish heart Organization put around US\$ 31 000 in the project, with hope to link with new funders for 2009. So far at least 20% of all the elementary schools in Denmark have used the calculation program for the fitness test on the Foundation website. In the future the Heart Foundation hopes to get all elementary school in Denmark to use the test; the program does not cover the families or communities, even though the teachers are encouraged to talk to the children about their leisure time activities. The Danish Heart Foundation has started to gather data, but has not done any statistics on the fitness levels measured from the children yet.

The Danish Heart Foundation had also launched another children programme in 2007, called "Frugtkvarter". It is a free fruit arrangement for two months offered to schools with a health plan for the school. Free fruit is delivered to the schools for two months (October until December) to encourage children to eat more fruit and vegetables. Schools have reported that the children are more focused during the classes. The program is built around a partnership with the Ministry of Food, Agriculture and Fisheries, a University College, The Danish Cancer Foundation, A gardening Committee and The biggest Danish Convenience Organization and covers 129 schools in Denmark. The program does not cover the families or communities directly, but the children are expected to encourage the parents to by more fruit and vegetables; the Foundation has gathered data for 2007 and will do the same for 2008, but cannot share them with the Federation at this stage.

The Danish Heart Foundation is also hoping to launch a new children programme at the end of this year, called Emergency rescue for children .The Emergency rescue program for children is a video that will be available on the internet where the actors are teenagers and which aims to appeal to the youth to encourage healthy lifestyles. Built around a partnership with The Ministry of Finance, the program is funded by an insurance company for around US\$ 59 000.

Poland

The National Institute of Cardiology runs the “Mind your Heart” programme which ran from 2006 until 2008, and might be re-conducted for the period 2009-2012. It targets the whole children population of Poland with a particular focus on children in the age bracket 11 to 16; this means that, in theory at least, 6.5 million children are covered by the programme, and ideally their parents and teachers too. The programme is organized around consultations, conferences taking place in schools, models of physical activity lessons to be implemented in schools, TV and radio segments, and a special website devoted to the issue of healthy living and healthy eating has been put in place. The programme is financed by the Ministry of Health with a budget of USD 2.5 million; several cardiology and other medical institutions are involved, as well as the TV and the radio. An evaluation of the programme should be ready in November 2008, comparing pre-and post-programme data.

The National Institute of Cardiology is also a partner in a project called “400 Cities”, a project launched in 2003 by several leading Polish medical universities and which addresses inhabitants of small cities with a population of <8000. The programme is constructed around education of children and youth on obesity and physical activity promotion.



Singapore

The programme run by the Singapore Heart Foundation started in 1999 and is called Jump Rope for Heart, which revolves around rope skipping skills and education on heart health through tours and exhibition. It also includes CPR education, and involves schools in health screening. It is aimed at children between 7 and 16 and is carried out in partnership with schools and various community partners. The annual budget for the programme varies, depending on the public and institutional support. The programme is evaluated with regards to learning, movement and physical health improvement of the targeted children. The results gathered have been processed in an evaluation but are not yet available for sharing.



Slovenia

The Slovenian Heart Foundation's programme, Healthy Children for Healthy Adults, has been in place for several years in primary schools in Ljubljana, covering about 1,000 children aged 8 to 14. The programme runs each year along the school year, September till June. The programme is constructed around seven topics: lectures on healthy foods, on physical activity, physical activity games, practical demonstration of healthy fruit shakes in schools, lectures on liquids (which ones and how much), prevention of atherosclerosis coupled with antismoking promotion, and measurements of blood pressure of all children with an explanation of the results. A major hiking/cycling event also takes place in June aimed at children and their families while Valentine's Day is dedicated to primary schools and children with special needs. Families of the targeted children are also involved through health prevention material distributed to children with an encouragement to discuss these with their parents and sports activities to do as a family. The budget is not planned in advance and depends for the major part on the Municipality of Ljubljana. Data have been gathered in 2007 to evaluate the children's knowledge on the issues explored by the programme, but so far the results of this evaluation are not available. However, the Heart Foundation also conducts mini-surveys in schools after each lecture; these have shown that if children are fully aware of what is a healthy lifestyle, they mostly do not live healthily, especially when it comes to nutrition.

South Africa

The Heart and Stroke Foundation runs the Community Children's Programme, which started in 1997. It targets children between 3 and 6 years old in primary schools, with a specific focus on children from a low socio-economic class. The programme, which covers 1,954 million children, involves the community through the parents, educators and minders of the children, and has developed modules on physical activity, nutrition, effects of smoking and rheumatic heart disease. Moreover, the Heart and Stroke Foundation runs a program targeted at pre-schoolers. It revolves around the concepts of basic nutrition, hygiene, anti-smoking, and Rheumatic Heart Disease. On the nutrition side, menus are prepared to be adapted by each different region of South Africa. The project also developed the "Sow-a-Seed" concept, whereby crèches grow fruits and vegetables so that healthy food is available. This part of the project recently won the Louise Lown "Heart Hero" Award for Childcare. The Heart and Stroke Foundation has taken the decision to help fund members from other heart foundations on the continent to come to South Africa and learn from the crèche programme.

UK

The British Heart Foundation's programme to fight childhood obesity is called Food for Thought and focuses on children from 11 to 13 years of age. The last campaign was structured around a series of posters and teasers aimed at making children go online to the BHF's website; message vans that drove around the UK; and a toolkit in the form of a "policy pizza" that was sent to schools around the country. The campaign proved very successful and made front-page news in the press, as well as follow-up orders from schools for the policy pizza. The BHF commissioned a survey that produced very positive results. A new phase of the campaign has now been launched, but this time it is an entirely internet-based campaign. The BHF is committed to carry out this project as long as it takes, with the overarching aim of reversing the trend of childhood obesity in the UK.

USA

The American Heart Association runs several programmes that target children. The largest being its involvement in the *Alliance for a Healthier Generation* which is a partnership between the American Heart Association and the William J. Clinton Foundation. The Alliance mission is to "eliminate childhood obesity and to inspire all young people in the United States to develop lifelong, healthy habits". In order to do so, it has set itself the goal of stopping the nationwide increase in childhood obesity by 2010 and to empower kids nationwide to make healthy lifestyle choices. It does so by targeting the places that can make a difference to a child's health: homes, schools, restaurants, doctor's offices, and the community.

The Alliance is developing action programmes around 5 axes and related media work: the Healthy Schools Program, the Industry Program, the Parents Program, the Kids Movement (Teens), and the Healthcare Program (Healthcare professionals, strong involvement of the AHA). The Alliance does not directly fund programmes. Rather, it secures partnerships with major contributors (such as the R. W. Johnson Foundation for the Healthy Schools Program) and matches potential donors with potential receivers. It also provides in-kind help and resources as well as toolkits developed by the Alliance itself and which are made available to the programmes' participants. It concludes partnerships with the food and beverage industry aiming to modify its behaviour. Finally, a major chunk of the Alliance's work is made up by active media presence, notable through on-air programmes aimed at motivating teens to lead healthy lives.

The AHA has also teamed up with the National Football League to create *What Moves U*, a new site full of creative ideas for getting active; What Moves U leverages the American Heart Association's health expertise and connection with schools and is backed by the NFL's mass appeal and commitment to physical fitness. NFL clubs are teaming up with AHA affiliates to tailor the campaign to the local community. In addition, the campaign draws on input from teachers and children throughout the country. The primary target for the campaign is middle school students, kids and teens, ages 9–13; the secondary targets are parents, teachers and the community. The campaign expects to reach more than 5 million children and teenagers. Key components of the What Moves U initiative include: In-School Learning Materials, such as activation kits for middle schools, curriculum-based activity sheets that are easy to weave into daily lesson plans for science, language arts, social studies, math and physical education; schools posters with NFL players and kids; tips on how to increase physical activity in the classroom and school-wide.

Like Asia-Pacific members, the AHA runs a *Jump Rope For Heart* programme, which is a national educational fund-raising programme that is sponsored by the American Heart Association and the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD). Jump Rope For Heart engages elementary students in jumping rope while raising funds to support lifesaving heart and stroke research. The same principles apply to the *Hoops for Heart* programme which teaches middle school students basketball skills.

The AHA also produces *HeartPower! Online*, a curriculum-based programme for teaching about the heart and how to keep it healthy for a lifetime. Nutrition, physical activity, living tobacco-free, and knowing how the heart works all are vital in maintaining a healthy heart.
