



HEPA Europe
European network for the promotion
of health-enhancing physical activity



Prospects for promoting physical activity among children – Perspektiven der Bewegungs- förderung von Kindern

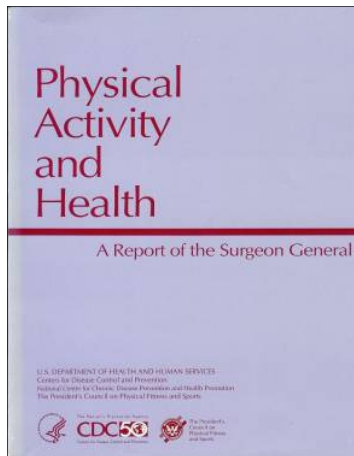
Brian Martin, MD MPH

*Physical Activity and Health Work Unit,
Institute for Social and Preventive Medicine, University of Zurich
HEPA Europe, the European network for the promotion of health-
enhancing physical activity*

Conference “Active Cities – Active Children”, Stuttgart, 01.10.2010

Prospects for PA promotion among children

- The public health rationale for PA promotion
- Recommendations and guidelines
- The role of settings and target groups
- The role of communities and local approaches
- Outlook – PA promotion and the economical crisis



CDC. Physical activity and health: a report of the Surgeon General. Atlanta (GA), US Department of Health and Human Services, Centers for Disease Control and Prevention, 1996.

www.cdc.gov/nccdphp/sgr/sgr.htm

First studies mentioned in Surgeon General's Report

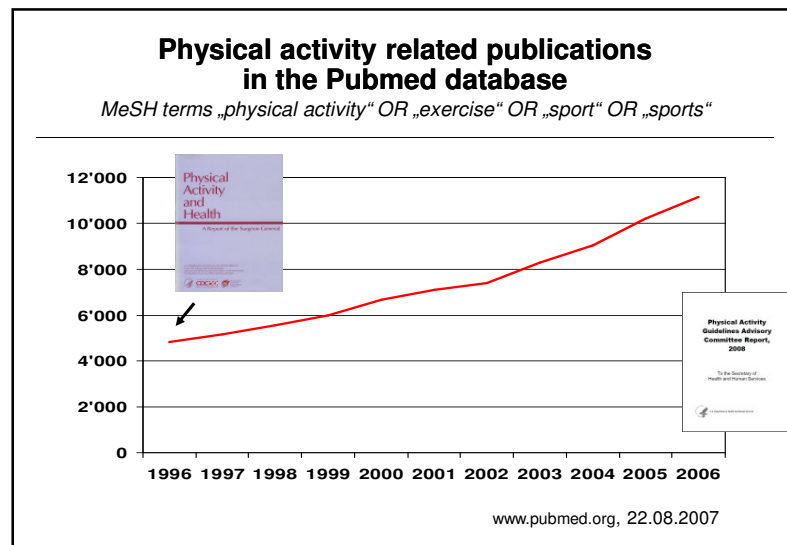
Physical activity and cardiovascular disease

Morris JN, Heady JA, Raffle PAB, Roberts CG, Parks JW. Coronary heart disease and physical activity of work. *Lancet* 1953;2:1111–1120.

Physical activity and cancer

Polednak AP. College athletes, body size, and cancer mortality. *Cancer* 1976;38:382–387.

CDC. Physical activity and health: a report of the Surgeon General. Atlanta (GA), US Department of Health and Human Services, Centers for Disease Control and Prevention, 1996.

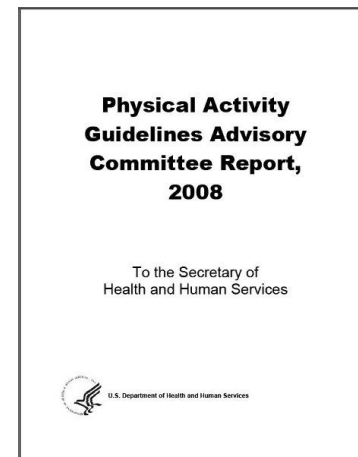


Basis for 2008 US and 2010 WHO recommendations

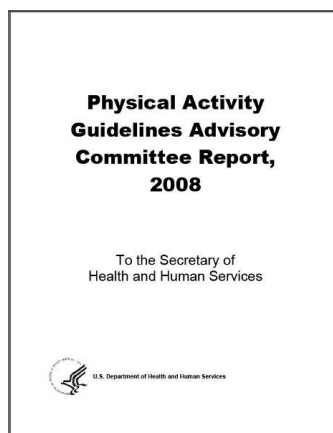
683 pages

Physical Activity Guidelines Advisory Committee. Physical Activity Guidelines Advisory Committee Report, 2008. Washington, DC: U.S. Department of Health and Human Services, 2008.

www.health.gov/paguidelines



Overall Benefits of Physical Activity on Health



„Very strong scientific evidence based on a wide range of well-conducted studies shows that physically active people have higher levels of health-related fitness, a lower risk profile for developing a number of disabling medical conditions, and lower rates of various chronic diseases than do people who are inactive.“

Health benefits of physical activity in adults

- | | |
|----------------------------------|--------------------------|
| ↑ Life expectancy | ↓ Coronary heart disease |
| ↑ Cardiorespiratory fitness | ↓ High blood pressure |
| ↑ Muscular fitness | ↓ Stroke |
| ↑ Healthy body mass | ↓ Diabetes type II |
| ↑ Healthy body composition | ↓ Metabolic syndrome |
| ↑ Bone health | ↓ Colon cancer |
| ↑ Sleep quality | ↓ Breast cancer |
| ↑ Health-related quality of life | ↓ Depression |

Additionally in older adults:

- | | |
|----------------------|-------------------|
| ↑ Functional health | ↓ Risk of falling |
| ↑ Cognitive function | |

↑ **strong evidence**
 ↑ **modest evidence**

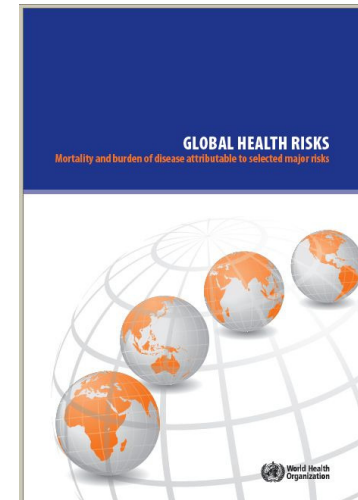
Physical Activity Guidelines Advisory Committee. Physical Activity Guidelines Advisory Committee Report, 2008. Washington, DC: U.S. Department of Health and Human Services, 2008.

Health benefits of physical activity in children

- ↑ Physical fitness
 - ↑ Cardiorespiratory endurance
 - ↑ Muscular strength
- ↓ Body fatness
 - ↓ Anxiety symptoms
 - ↓ Depression symptoms
- ↑ Health status
 - ↑ Favourable cardio-vascular risk profile
 - ↑ Favourable metabolic disease risk profile
 - ↑ Bone health

↑ **strong evidence**
 ↑ **modest evidence**

Physical Activity Guidelines Advisory Committee. Physical Activity Guidelines Advisory Committee Report, 2008. Washington, DC: U.S. Department of Health and Human Services, 2008.



2009

Figure 1: The causal chain. Major causes of ischaemic heart disease are shown. Arrows indicate some (but not all) of the pathways by which these causes interact.

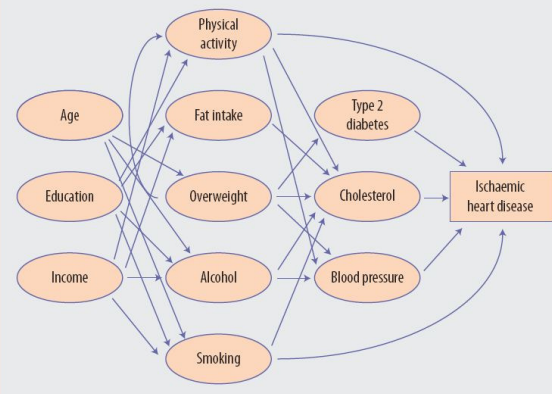


Figure 2: The risk transition. Over time, major risks to health shift from traditional risks (e.g. inadequate nutrition or unsafe water and sanitation) to modern risks (e.g. overweight and obesity). Modern risks may take different trajectories in different countries, depending on the risk and the context.

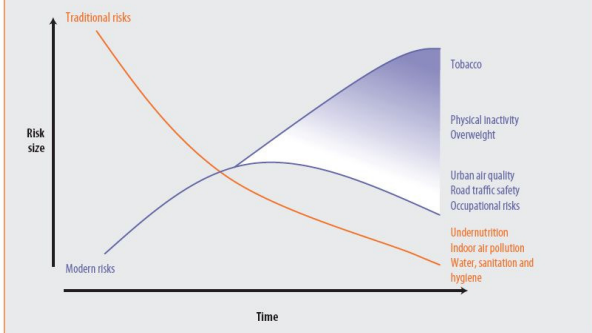
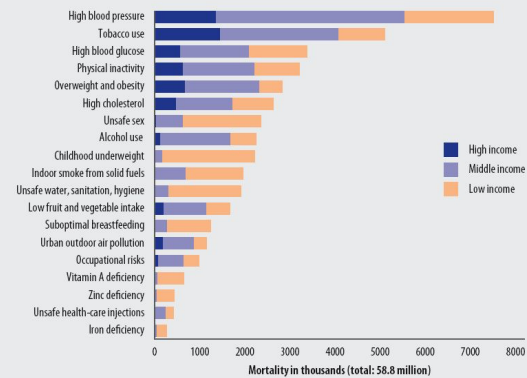
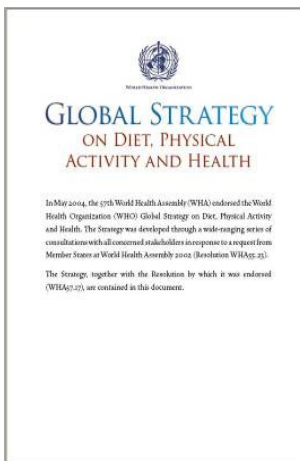


Figure 6: Deaths attributed to 19 leading risk factors, by country income level, 2004.



Prospects for PA promotion among children

- The public health rationale for PA promotion
 - Good evidence from public health, more to come
 - Need for stronger evidence from other fields
 - Political rationale is not individual motivation!
- Recommendations and guidelines
- The role of settings and target groups
- The role of communities and local approaches
- Outlook – PA promotion and the economical crisis

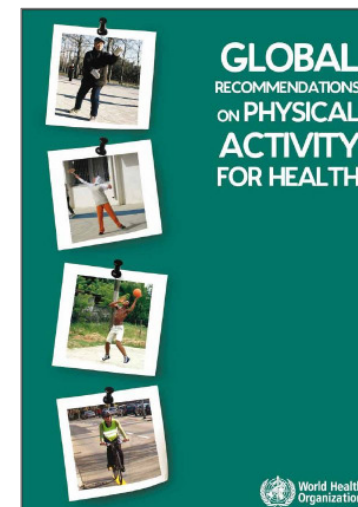


2004



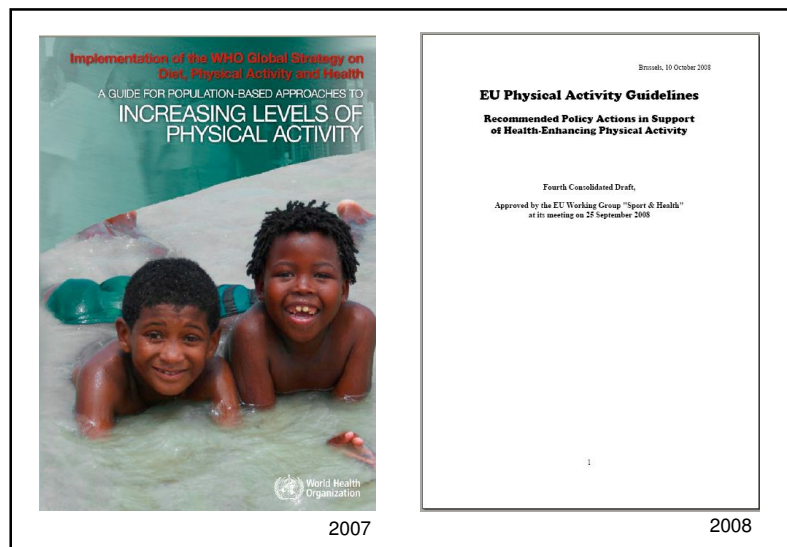
Ministerial conference

2006



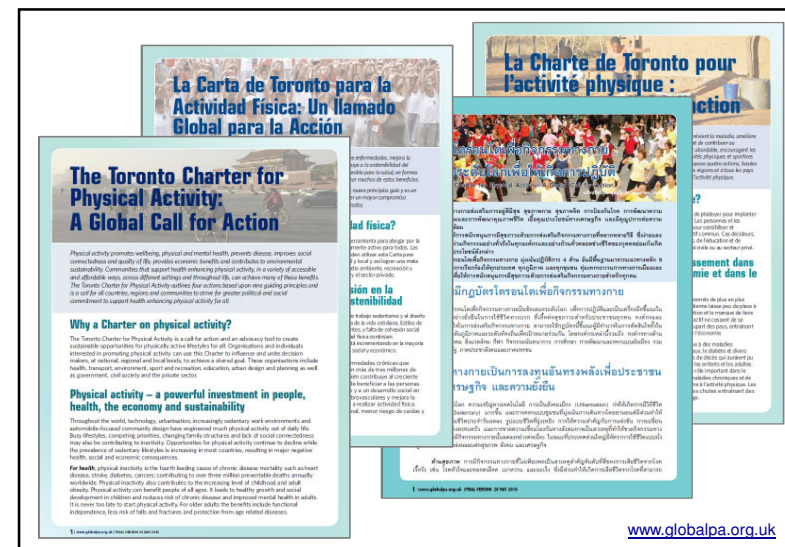
2010

www.who.int/dietphysicalactivity

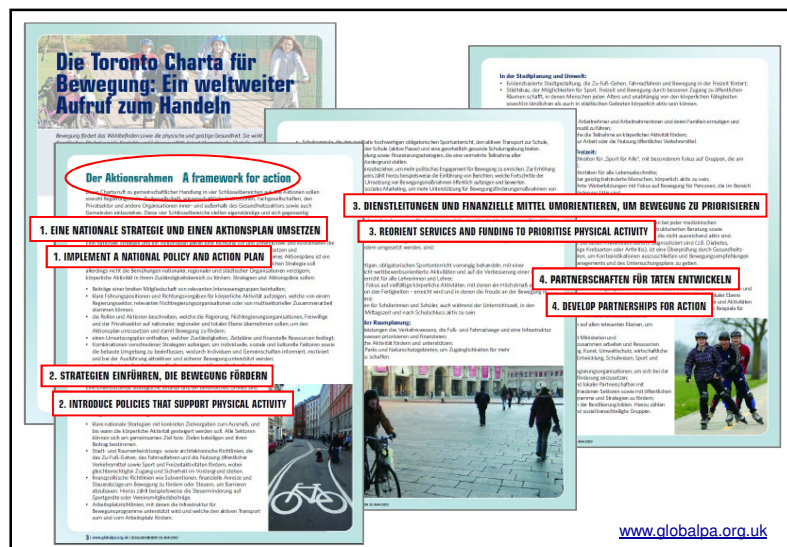


2007

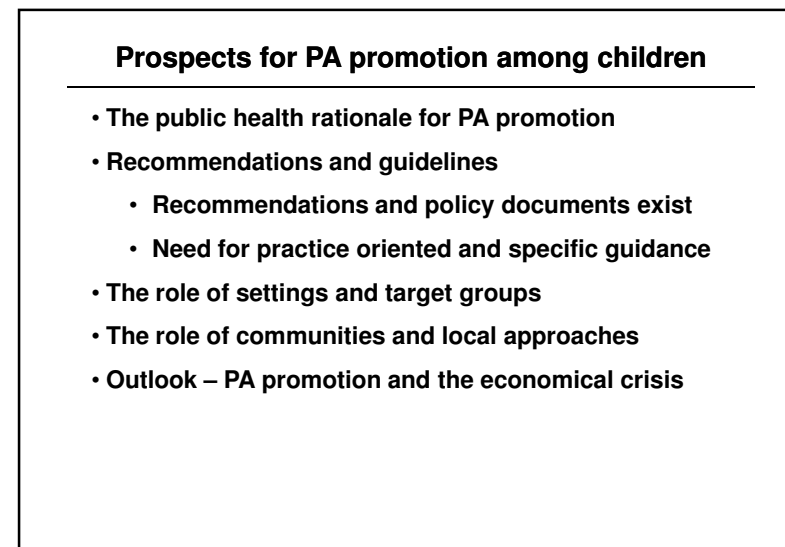
2008



www.globalpa.org.uk



www.globalpa.org.uk





www.active-online.ch

Original Paper

Effectiveness of Active-Online, an Individually Tailored Physical Activity Intervention, in a Real-Life Setting: Randomized Controlled Trial

Miriam Wanner^{1,2}, MSc; Eva Martin-Diener¹, MPH; Charlotte Braun-Fahrlander², MD; Georg Bauer^{3,4}, MD, DrPH; Brian W Martin^{1,3}, MD, MPH

¹Swiss Federal Institute of Sport Magglingen, Magglingen, Switzerland

²Institute of Social and Preventive Medicine, University of Basel, Basel, Switzerland

³Institute of Social and Preventive Medicine, University of Zurich, Zurich, Switzerland

⁴Center for Occupational and Organizational Sciences ETH Zurich, Zurich, Switzerland

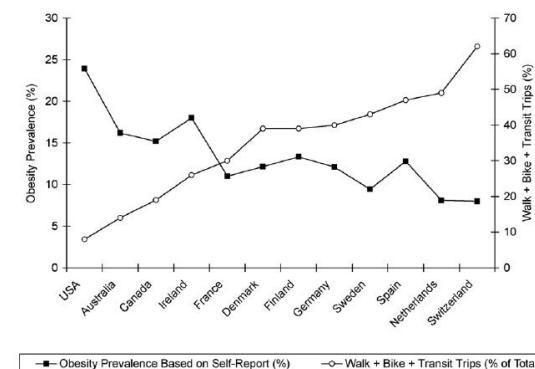
(J Med Internet Res 2009;11(3):e23) doi:10.2196/jmir.1179



"Calling on physicians to assess and review every patient's physical activity program at every visit"

**ACSM'S 57TH ANNUAL MEETING AND
WORLD CONGRESS ON EXERCISE IS MEDICINE™
JUNE 1-5, 2010 • BALTIMORE, MARYLAND**

Walking, Cycling, and Obesity Rates in Europe, North America, and Australia



Bassett DR, Pucher J, Buehler R, Thompson DL, Crouter SE. J Phy Act Health 2008; 5: 795-814.

The Health Economic Assessment Tool HEAT for Cycling

Microsoft Excel - Cycling HEAT v5.2.2.xls

Health Economic Assessment Tool for Cycling

Fill in the two fields in Step 1 with values for your study. Then decide whether to use the default parameters supplied in Step 2 or adjust them according to your needs. Results are then presented in Step 3. The population parameters used to calculate the results are displayed at the bottom of the sheet.

Step 1: enter your data (all users must fill in the red fields)

Number of trips per day: 10'000

Mean trip length (km): 4

Step 2: check the parameters

Mean number of days cycled per year: 124

Proportion of trips that are one part of a return journey (or 'round trip'): 0.9

Proportion undertaken by people who would not otherwise cycle: 0.5

Mean proportion of working age population who die each year: 0.005847

Value of life (in Euros): EUR 1'500'000

Discount rate: 5.0%

Step 3: read the economic savings resulting from reduced mortality

Maximum annual benefit: EUR 2'287'000

Present value of mean annual benefit: EUR 2'287'000

Population parameters used to calculate results

Population that stands to benefit: 2750

Mean proportion of working age population who die each year: 0.005847

Expected deaths in the local population: 16.08

Protective benefit, according to actual distance traveled: 0.17

Lives saved: 2.81

www.euro.who.int/hepa

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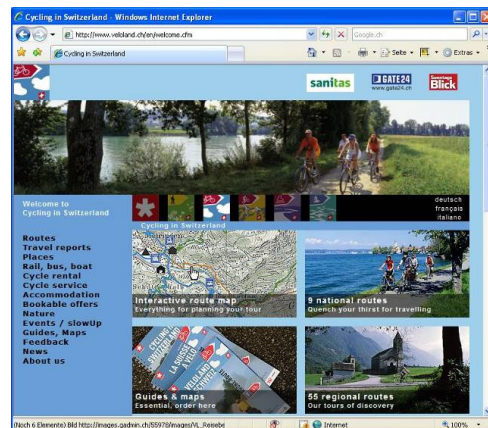
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Cycling in Switzerland as part of SwitzerlandMobility



www.euro.who.int

PA promotion guidance based on international evidence



www.thecommunityguide.org/pa

Prospects for PA promotion among children

- The public health rationale for PA promotion
- Recommendations and guidelines
- The role of settings and target groups
 - Settings are where PA promotion takes place
 - The community is an absolutely essential setting
 - Approaches can span several settings
- The role of communities and local approaches
- Outlook – PA promotion and the economical crisis



Annual Conference & Meeting of HEPA Europe Palacky University Olomouc Czech Republic 24-26.11.10

www.euro.who.int/hepa

HEPA Europe Steering Committee since Nov 2009

- Willem van Mechelen, VU Medical School, Amsterdam, NL (Chair)
- Andrea Backović Juričan, CINDI Slovenia
- Winfried Banzer, Olympics Sports Confederation, Germany
- Finn Berggren, Gerlev PE and Sports Academy, Denmark
- Charlie Foster, BHF Health Promotion Research Group, Oxford, UK
- Maarten Koornneef, Ministry of Health, Welfare and Sport, NL
- Brian Martin, University of Zurich, Switzerland
- Jean-Michel Oppert, Paris VI University, Hotel Dieu, France
- Francesca Racioppi, WHO Regional Office for Europe
- Harry Rutter, National Obesity Observatory England, UK
- Michael Sjöström, Karolinska Institute, Sweden
- Radim Šlachta, Palacky University, Czech Republic
- Mireille van Poppel, VU Medical School, Amsterdam, NL
- Tommi Vasankari, UKK Institute, Tampere, Finland
- Observer: Fiona Bull, GAPA
- Observer: Eddy Engelsman, WHO Headquarters
- Technical support: Sonja Kahlmeier, University of Zurich, Switzerland

HEPA Europe – Secretariat at WHO Europe

To be recruited
Technical officer
Rome

Cooperation with
Lideke Middelbeek
Technical officer
WHO Copenhagen

Helena Shkarubo
Cristina Fumo
Manuela Gallitto
Administrative support



Technical and secretarial
support from University
of Zurich



Access to other WHO
programmes and
activities

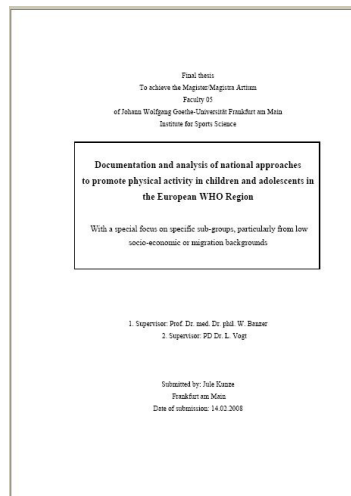
Francesca Racioppi
Acting director
WHO Rome office
Member of HEPA
Europe Steering
Committee

Nicoletta Di Tanno
Information outreach

Working group on physical activity and sport promotion in children



www.euro.who.int/hepa



- Multi-stage search identified initial list of 135 programmes
- 32 approaches from European countries identified with information in English or German
- Complete information (43 items) on 21 approaches from 12 countries

Kunze J. Documentation and analysis of national approaches to promote physical activity in children and adolescents in the European WHO Region. Master Thesis. Frankfurt am Main, Johann Wolfgang Goethe-Universität: 2008.

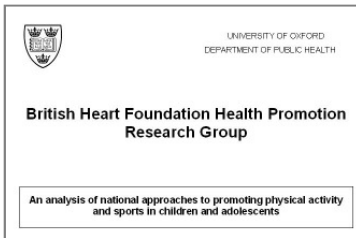


Charlie Foster Senior Researcher
Nick Cavill Research Associate
Paul Kelly Researcher

Research questions

- Main strengths and weaknesses?
- Success in reaching population sub-groups?
- Structural integration, potential for sustainable impact?
- Ability to contribute to physical activity promotion?
- Lessons learned?
- How do lessons apply to future and existing programmes?

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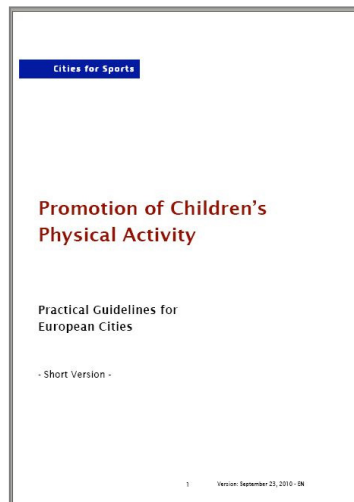
Programmes analysed

- Beweegkriebels
The Netherlands
- Handshake with Sport
Sweden
- Kampagne Kinderturnen - Kinderturn-Test
Germany
- Move with Us
Spain
- Sports Adventure around the Globe
Finland
- Youth and Sports
Switzerland

www.euro.who.int/hepa

Prospects for PA promotion among children

- The public health rationale for PA promotion
- Recommendations and guidelines
- The role of settings and target groups
 - Settings are where PA promotion takes place
 - The community is an absolutely essential setting
 - Approaches can span several settings
 - Children are a very important target group
 - Guidance and exchange of experiences is needed
- The role of communities and local approaches
- Outlook – PA promotion and the economical crisis



Local seed money projects Switzerland



Local seed money projects

- Community level physical activity promotion projects, financially supported by funds from the national level
- Successful in national physical activity programmes in Finland and England (~ 500-1000 US\$/project)
- Opportunity for Swiss physical activity campaign planned for 2000

Local seed money projects Switzerland

- Opportunity for Swiss physical activity campaign planned for 2000
- No PA campaign but general health promotion campaign
- Seed money project carried out independently
 - 55'000 Swiss Francs (40'000 Euro) to be distributed over ½ year, 1000 Francs (700 Euro) per project
 - Project guide developed and made available in German, French and Italian
 - Minimal evaluation requirements; 500 Francs available after application, 500 Francs after final questionnaire

Martin B. Lokale Projektunterstützung Bewegung 2000 bis 2002. Bericht zum Projekt von Gesundheitsförderung Schweiz und des Bundesamts für Sport Magglingen. 2003

Local seed money projects Switzerland 2000-2002

- Original objectives were not met, duration changed from ½ year to 2 years
- Still only 19'500 Swiss Francs out of 55'000 distributed
- Financial support appreciated, all other support hardly used
- The need for evaluation was not understood
 - Many projects did not collect second 500 Francs because they did not send in the final questionnaire
 - Only minority of projects took part in further quality control and only in most rudimentary way

Martin B. Lokale Projektunterstützung Bewegung 2000 bis 2002. Bericht zum Projekt von Gesundheitsförderung Schweiz und des Bundesamts für Sport Magglingen. 2003

Prospects for PA promotion among children

- **The public health rationale for PA promotion**
- **Recommendations and guidelines**
- **The role of settings and target groups**
- **The role of communities and local approaches**
 - **International and national level can provide policy and strategic support and additional funding**
 - **PA promotion takes place at the local level, local experiences are what counts**
 - **For local experiences to be used widely, structures for exchange of experiences are needed**
- **Outlook – PA promotion and the economical crisis**

Outlook

- Quantification of health effects of physical activity and the extent of physical inactivity has only begun
 - Stronger evidence for physical activity promotion will emerge from other fields
 - Demographic change and technological developments will further increase the importance of PA promotion
 - Further alliances are possible for PA promotion
 - The political process is usually not a continuous and only seldom a smooth one
- have your evidence and your tools ready when a window of opportunity opens up