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Two base documents for Switzerland: “Health-Enhancing Physical Activity” and “Muscle-Powered Mobility”

Abstract

There is growing interest in the promotion of health-enhancing physical activity (HEPA) among public and private institutions in different sectors and on all levels. In view of this development there is a need for evidence-based communication material for partners to be used in advocacy and for guidance in interventions.

A first base document “Health-Enhancing Physical Activity” was introduced in 1999 following the example of the Dutch manifesto. In 2006, the document was thoroughly revised in coordination with the development of a comparable European document. Its five parts are: health effects and recommendations, physical activity behaviour, economic estimates, determinants and interventions to increase physical activity. The development of the base document “Muscle-Powered Mobility” was part of a work package of Switzerland’s National Sports Policy. Specific reviews were carried out, combining international and national experiences. The document was structured along the model of the HEPA base document.

The format of the base documents has been successful in Switzerland and has contributed to increasing knowledge and understanding in the field. In order to keep up with the state of the art, it is necessary to carry out regular reviews and revisions of the documents.

Zusammenfassung

Partner aus öffentlichen und privaten Institutionen, aus vielen Fachgebieten und auf verschiedenen politischen Ebenen zeigen immer grösseres Interesse an der Bewegungsförderung. In Anbetracht dieser Entwicklung braucht es evidenzbasierte Kommunikationsmaterialien, welche Partner in ihrer Argumentation oder in Projekten einsetzen können.

Ein erstes Grundlagendokument «Gesundheitswirksame Bewegung» wurde nach dem Vorbild des niederländischen Manifesto entwickelt und 1999 veröffentlicht. 2006 wurde das Dokument in Koordination mit der Entwicklung einer analogen europäischen Broschüre grundlegend überarbeitet. Es besteht aus fünf Kapiteln: Gesundheitseffekte und Empfehlungen, Bewegungsverhalten, ökonomische Schätzungen, Determinanten und Interventionen. Die Entwicklung des Dokuments «Mit Muskelkraft unterwegs» war Teil einer Massnahme des Konzepts des Bundesrats für eine Sportpolitik in der Schweiz. Die Inhalte basieren auf nationalen und internationalen Erfahrungen. Die Struktur orientierte sich am Grundlagendokument «Gesundheitswirksame Bewegung».

In der Schweiz hat sich der Einsatz der Grundlagendokumente bewährt. Die Broschüren haben zum Wissen und Verständnis im Fachgebiet beigetragen. Um mit der Entwicklung und dem Wissenszuwachs Schritt halten zu können, sollten regelmässige Reviews durchgeführt und die Dokumente aktualisiert werden.

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Introduction

In the last fifteen years, the importance of physical activity for public health has been recognised in many countries and also by many international organisations (Martin et al, 2009). The World Health Organisation WHO has addressed physical activity specifically in the *Global Strategy on Diet, Physical Activity and Health* which was adopted by the *World Health Assembly* in 2004 (WHO, 2004). WHO’s European Charter on Counteracting Obesity (WHO, 2006) was adopted in 2006 by a Ministerial Conference in Istanbul and is also supported by Switzerland. “More physically active people” is the first goal of Switzerland’s National Sports Policy according to the concept adopted by the federal government in 2000 (Swiss Federal Office of Sport, 2000). Since summer 2008, Switzerland also has a National Programme

Diet and Physical Activity (BAG, 2008). Interest in the issue of health-enhancing physical activity keeps growing in political and administrative circles, in public health, among sport professionals of all different levels and increasingly also in other sectors with existing or potential influence on walking and cycling behaviour at the population level. These interested parties must be provided with information that is based on the latest evidence but presented in a form that allows them to use it for advocacy and that provides them with guidance in their activities.

This review gives an overview of the history of the Swiss national “base document” on health-enhancing physical activity HEPA and it describes the process behind the more recent development of a document on “Muscle-Powered Mobility” (figure 1). A more detailed description is available in German (Martin-Diener et al., 2008a) and in French (Martin-Diener et al., 2008b).

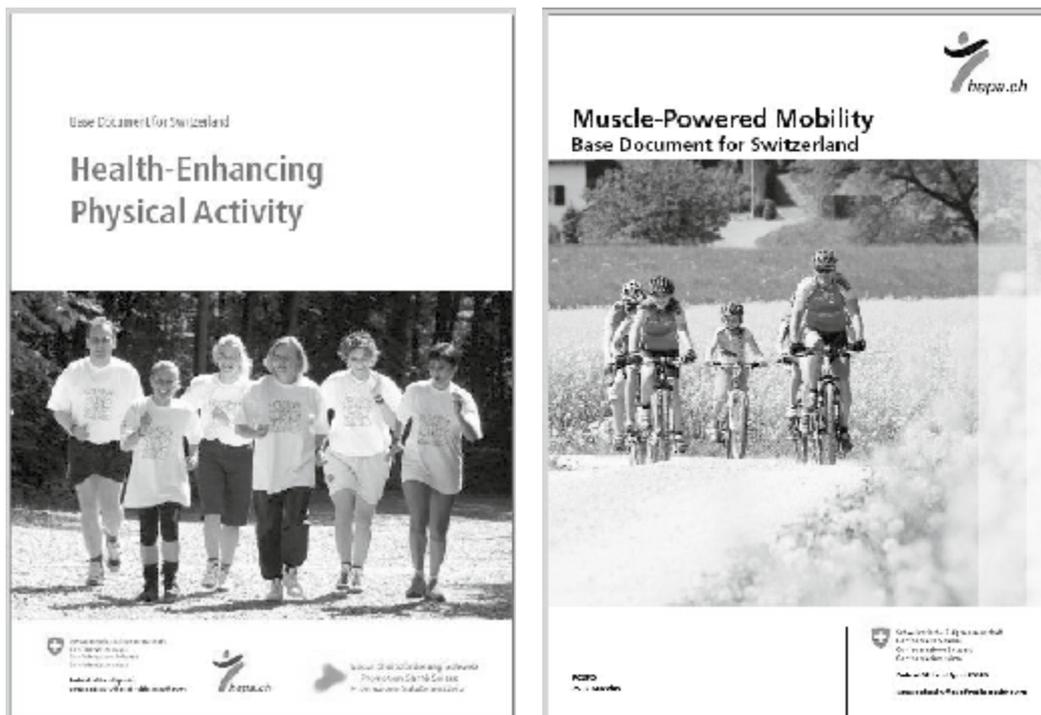


Figure 1: Title pages of the Swiss base documents “Health-Enhancing Physical Activity» and “Muscle-Powered Mobility» published in 2006 and 2008 respectively. All language versions are available at www.hepa.ch

The HEPA base document

In Switzerland, activities in the field of physical activity and health started in 1995 with a national symposium in Magglingen. In 1999, the network HEPA Switzerland, the national network for the promotion of health-enhancing physical activity (Martin, 2005) was founded. Following the example of the Dutch “manifesto”, the first Swiss base document “Health-Enhancing Physical Activity” (BASPO et al, 1999) was created in the same year. It listed ten principles of health-enhancing physical activity in our country, and became an important element of the network. In 2002 it was updated.

Already the first base document and its updated version had the aim to provide facts and arguments for all partners active in the field and to motivate them to use the same messages and numbers in communication. However, in 1999 only little was known about the possibilities for influencing physical activity behaviour. The growing body of evidence in this field and the dramatically increased interest in physical activity in children (Martin et al, 2006a) were the reason for a complete revision. The result was a substantially longer document addressing also determinants of physical activity and possible interventions to change behaviour. It was conceptualised to address professionals in physical activity promotion, but also political decision makers, journalists and lay persons interested in the field. As similar processes were going on within WHO and within HEPA Europe, the European network for the promotion of health-enhancing physical activity (Martin et al, 2006b), it was possible to closely coordinate with and profit from the development of the booklet “Physical activity and health in Europe: Evidence for action” (Cavill et al, 2006) with a practically identical concept for a European audience.

When the Swiss base document “Health-Enhancing Physical Activity” was published in 2006 (Federal Office of Sport), it had the following structure:

- The first part was summing up the health effects of physical activity and describing the national recommendations for health-enhancing physical activity as they had been defined in 1999 for adults and in 2006 for school-aged children and adolescents (Martin et al., 2009).
- The second part was giving an overview of the existing data on physical activity behaviour in the Swiss population. By then, two thirds of the adult population not meeting current recommenda-

tions were the best available estimates derived from the 2002 Swiss Health Survey (Martin et al, 2009).

- The first estimates of the economic consequences of physical inactivity in Switzerland were published in 2001 (Martin et al.) and based on the overly optimistic physical activity figures from the 1999 HEPA survey (Martin et al., 2009). For the revised base document, the same assumptions as in the 2001 study were made for the prevalence of the diseases included in the model, for their relative risks associated with physical inactivity and for the respective treatment costs, but the prevalence estimates of inactivity were adapted to those from the 2002 Swiss Health Survey (Martin et al., 2009). With these conservative assumptions concerning disease frequency and their financial consequences, direct costs of physical inactivity in Switzerland were estimated to reach 2.4 billion Euro.
- In the fourth part, the non-modifiable and the modifiable determinants of physical activity were briefly introduced and the latter were further differentiated into three groups: personal factors (e.g. attitudes, values) and factors of the social (e.g. family, peer groups) or physical environment (e.g. access to facilities) respectively (see figure 2).

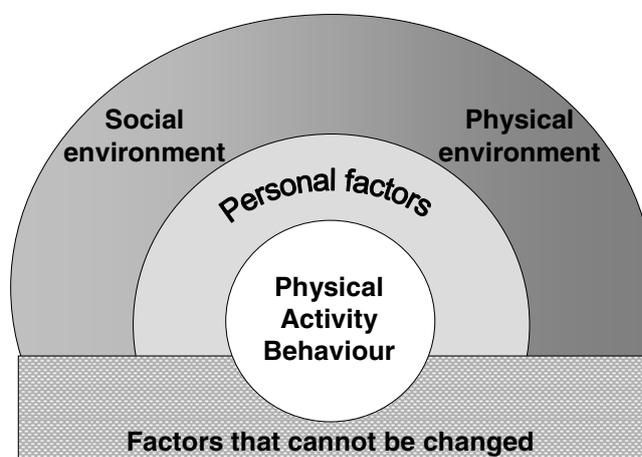


Figure 2: Modifiable and non-modifiable determinants of physical activity. Model adapted from Dahlgren (1995).

- The final part of the document dealt with interventions for physical activity promotion, using the following classification: structured activities, campaigns and events, construction of activity-friendly environments, and counselling and support. For each type of activity, the international evidence was briefly summarised and spotlight description were given of national examples that were either very well studied and evaluated or that had a great importance in terms of practical implementation. Examples of interventions within specific settings were given and the document concluded by declaring the following basic principles of physical activity promotion: population-wide approach, taking into account specific conditions, broad view of physical activity, involving other disciplines, working on several levels, collecting knowledge and learning from it.

Background of the document “Muscle-Powered Mobility”

In Switzerland, the promotion of sustainable transport was one of the focal points of the action plan Environment and Health 1998–2007 (Swiss Federal Office of Public Health and Swiss Agency for the Environment, Forests and Landscape, 1998). Furthermore, the promotion of “human powered mobility” was one of the measures of the first implementation period of the Swiss Federal Government’s Concept for a National Sports Policy 2003–2006 (Swiss Federal Office of Sport, 2000). Both these projects collaborated with international activities, particularly those of the Pan-European Programme Transport, Health and Environment THE PEP of the United Nations Economic Commission for Europe UNECE and WHO Europe (Martin et al., 2004) and those of WHO Europe and HEPA Europe (Martin et al., 2006b).

In September 2005, a symposium on Transport-Related Physical Activity and Health (Swiss Federal Office of Sport et al., 2005) was organised in Magglingen as a satellite event to the 6th international walk-21 conference in Zurich. It was the first such event at an international level and after the exchange on national and international approaches, the experts in the final sessions agreed on priorities for further development with “make available and disseminate your knowledge and experience” as the last point (table 1).

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| <ul style="list-style-type: none"> – Develop and establish a monitoring system for active transport – Investigate the determinants of active transport – Investigate the effectiveness of interventions to promote active transport; use natural experiments (e.g. London Congestion Charge) – Use objective measures (accelerometers, GIS data bases) and already existing data bases available from other sectors – Use the economy to make the case – Investigate the implementation processes of action (policy research) – Make available and disseminate your knowledge and experience |
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Table 1: Conclusions of the international symposium *Transport-Related Physical Activity and Health*, Magglingen, September 2005: Priorities for further development.

Therefore, it was decided to elaborate a base document particularly on this topic under the title of “Muscle-Powered Mobility” (Swiss Federal Office of Sport, 2008). It was part of the documentation of the “human-powered mobility” work package of the Swiss Concept for a National Sports Policy 2003–2006 (Swiss Federal Office of Sport, 2000). It was based on results from Swiss studies and project evaluations as well as on the evidence from the international literature. The contents were consolidated with professionals from the Federal Office of Public Health, the Federal Office of Spatial Development, the Federal Roads Office and the Swiss Council for Accident Prevention.

In the document, Muscle-Powered Mobility was defined as either utilitarian walking or cycling to get from point A to point B (e.g. walking to work, cycling to the cinema) or a leisure time activity as such (e.g. a cycling tour or jogging session). Such muscle-powered activities can be performed with moderate intensity or vigorously – irrespective of their purposes.

The overviews on the health effects of physical activity and the possible intervention strategies in the promotion of physical activity were based on the respective sections in the “Evidence for Action” booklet and a related document for local government (Cavill et al., 2006; Edwards and Tsouros, 2006). For the sections on the built environment, the syntheses and recommendations provided by the report of the National Institute for Health and Clinical Excellence NICE (NICE, 2008) as well as the American foundation *Active Living Research* (www.activelivingresearch.org) were used. Specific Swiss data sources were the Swiss Health Surveys 1992, 1997 and 2002 (Martin et al, 2009), the Swiss Microcensus on Travel Behaviour 2005 (BFS and ARE, 2007), a report on the costs of non-occupational accidents published by the Swiss Council for Accident Prevention (Sommer et al., 2007) and evaluations of Swiss projects (e.g. Thommen et al., 2006; Thommen et al., 2007).

Content and structure of the base document “Muscle-Powered Mobility”

The “Muscle-Powered Mobility” document (Swiss Federal Office of Sport, 2008) had a similar aim and target audience as the HEPA base document and it mainly followed its structure:

- After an introduction shortly introducing the main concepts, the first part of the document dealt with physical activity and health, physical activity and mobility behaviour in Switzerland and with undesirable effects of mobility on health, in particular with accidents and air pollution
- The second part dealt with factors influencing human-powered mobility, using the model introduced in the HEPA base documents, with a specific focus on the role of the built environment
- In the section on the promotion of human-powered mobility, key regulatory framework parameters for Switzerland were presented first, which were then followed by specific measures. The categories introduced in the HEPA base document were used again (structured activities, campaigns and events, activity-friendly environments, and counselling and support), but “financial incentives” were introduced as a new one. The basic principles for the promotion of human-powered mobility correspond to those for physical activity promotion.

Conclusions

In health promotion it is important to make knowledge and experiences available for a broad audience. Since ten years now, there have been efforts in Switzerland to communicate the evidence on the health effects of physical activity, on activity levels and later also on determinants of physical activity and on possibilities for interventions.

The HEPA base document has been successfully used and adapted, in its latest version it has even been possible to coordinate it with corresponding documents at the European level. It has been an important source of information for advocacy, for teaching, for implementation and also for the media. A set of transparencies and a document with key arguments to “make the case” were offered in addition to the base document. The new base document on “Muscle-Powered Mobility” follows the structure of the HEPA document, it has been elaborated over several years combining international with national experiences and concepts.

The format of the base documents available in several languages has been successful in Switzerland and has contributed to increasing knowledge and understanding of physical activity and health. However, it is necessary to follow the rapid growth of evidence in

both physical activity and health in general and in transport-related physical activity and health in particular and to carry out regular reviews and revisions of the documents.

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References

- BAG (2008): Nationales Programm Ernährung und Bewegung (NPEB 2008–2012). Bundesamt für Gesundheit, Bern.
- BASPO, BAG, Gesundheitsförderung Schweiz, Netzwerk Gesundheit und Bewegung Schweiz (1999): Gesundheitswirksame Bewegung. Ein Grundsatzdokument. Bundesamt für Sport, Magglingen.
- BFS, ARE (2007): Mobilität in der Schweiz. Ergebnisse des Mikrozensus 2005 zum Verkehrsverhalten. Bundesamt für Statistik und Bundesamt für Raumentwicklung, Neuchâtel and Bern.
- Cavill N., Kahlmeier S., Racioppi F. (eds). (2006): Physical activity and health in Europe: evidence for action. World Health Organisation Regional Office for Europe, Copenhagen.
- Dahlgren G. (1995): The need for intersectoral action for health. In: Harrington P, Ritsatakis A (eds). European Health Policy Conference: opportunities for the future, Copenhagen 5–9 December 1994. Volume II. The policy framework to meet the challenges – Intersectoral action for health. World Health Organisation Regional Office for Europe, Copenhagen.
- Edwards P., Tsouras A. (eds). (2006). Promoting Physical Activity and Active Living in Urban Environments: The Role of Local Governments. The Solid Facts. Copenhagen: World Health Organisation Regional Office for Europe.
- Martin B.W., Mäder U., Stamm H.P., Braun-Fahrlander C. (2009): Physical activity and health – what are the recommendations and where do we find the Swiss population? *Schweiz Z Sportmed Sporttraumatol* 57 (2): 37–43.
- Martin B., Wyss T., Mengisen W., Roost H.P., Spieldenner J., Schlegel F., Rudin D., Somaini B., Kriemler S., Mahler P., Cassis I., Farpour-Lambert N., Marti B (2006a): BAG-Bulletin 18: 326–331. Gesundheitswirksame Bewegung – auf dem Weg zu Empfehlungen für Kinder und Jugendliche. Kommentar zu den Empfehlungen des Bundesamts für Sport BASPO, des Bundesamts für Gesundheit BAG, Gesundheitsförderung Schweiz und des Netzwerks Gesundheit und Bewegung Schweiz aus dem Jahr 2006. BAG-Bulletin 18: 328–331.
- Martin B.W., Kahlmeier S., Racioppi F., Berggren F., Miettinen M., Oppert J.M., Rutter H., Slachta R., van Poppel M., Zakotnik J.M., Meusel D., Oja P., Sjöström M. (2006b): Evidence-based physical activity promotion – HEPA Europe, the European Network for the promotion of Health-Enhancing Physical Activity. *J Pub Health* 14(2): 53–57.
- Martin B.W. (2005): Promotion of Health-Enhancing Physical Activity HEPA in Switzerland. In Martin B.W. (ed): Physical Activity Expert Meeting “Agita Europe”. Magglingen, Switzerland 13.–15.06.2004. Meeting Report. Magglingen and Bern: Swiss Federal Offices of Sport and Public Health, 42–43.
- Martin B., Martin-Diener E., Balandraux-Olivet M., Mäder U., Ulrich U. (2004): Transnational Project and Workshop Series of Austria, France, Malta, the Netherlands, Sweden and Switzerland. Transport-Related Health Effects with a Particular Focus on Children. Towards an Integrated Assessment of their Costs and Benefits. State of the Art Knowledge, Methodological Aspects and Policy Directions. Topic Report Physical Activity. Swiss Federal Offices of Sport and Public Health, Magglingen and Bern.
- Martin B.W., Beeler I., Szucs T., Smala A.M., Brügger O., Casparis C., Allenbach R., Raeber P.A., Marti B. (2001): Economic benefits of the health-enhancing effects of physical activity: first estimates for Switzerland. Scientific position statement of the Swiss Federal Office of Sports, Swiss Federal Office of Public Health, Swiss Council for Accident Prevention, Swiss National Accident Insurance Organisation (SUVA), Department of Medical Economics of the Institute of Social and Preventive Medicine and the University Hospital of Zurich and the Network HEPA Switzerland. *Schweiz. Schweiz Z Sportmed Sporttraumatol* 49(3): 131–133.
- Martin-Diener E., Ulrich U., Bruggmann L., Marcacci A., Martin B. (2008a): Aktuelle Grundlagendokumente der nationalen Partner zu Bewegung und Gesundheit. BAG-Bulletin 46: 819–825.
- Martin-Diener E., Ulrich U., Bruggmann L., Marcacci A., Martin B. (2008b): Documents de base des partenaires nationaux liés à l’activité physique et à la santé. *Bulletin OFSP* 46: 819–825.
- NICE (2008): Promoting and creating built or natural environments that encourage and support physical activity. National Institute for Health and Clinical Excellence, London.
- Sommer H., Brügger O., Lieb C, Niemann S. (2007): Volkswirtschaftliche Kosten der Nichtberufsunfälle in der Schweiz: Strassenverkehr, Sport, Haus und Freizeit (bfu-Report 58). Beratungsstelle für Unfallverhütung, Bern.
- Swiss Federal Office of Public Health and Swiss Agency for the Environment, Forests and Landscape (1998): Sustainable Development. Action Plan Environment and Health. Swiss Federal Office of Public Health, Bern.
- Swiss Federal Office of Sport, Swiss Federal Office of Public Health, Network HEPA Switzerland. (2008): Muscle-Powered Mobility. A base document. Swiss Federal Office of Sport, Magglingen.
- Swiss Federal Office of Sport, Swiss Federal Office of Public Health, Health Promotion Switzerland, Network HEPA Switzerland. (2006): Health-Enhancing Physical Activity. A base document. Swiss Federal Office of Sport, Magglingen.
- Swiss Federal Office of Sport, Swiss Federal Office of Public Health, WHO Regional Office for Europe. (2005): Walk21 Satellite Symposium on Transport-Related Physical Activity and Health. Book of abstracts. Swiss Federal Office of Sport, Magglingen.
- Swiss Federal Office of Sport (2000): The Swiss Federal Government’s Concept for a National Sports Policy. Swiss Federal Office of Sport, Magglingen.
- Thommen Dombois O., Braun-Fahrlander C., Martin-Diener E. (2007): Comparison of adult physical activity levels in three Swiss alpine communities with varying access to motorised transportation. *Health Place*. 13:757–66.
- Thommen O., Kahlmeier S., Martin-Diener E., Martin B.W., Racioppi F., Braun-Fahrlander C. (2006): Collaboration between the Health and Transport Sectors in Promoting Physical Activity: Examples from European Countries. World Health Organisation Regional Office for Europe, Copenhagen.
- WHO (2006): European Charter on Counteracting Obesity. World Health Organisation Regional Office for Europe, Copenhagen.
- WHO (2004): Global Strategy on Diet, Physical Activity and Health. World Health Organisation, Geneva.