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## Executive summary

Health Council of the Netherlands. On the move. The effect of the built environment on our physical activity. The Hague: Health Council of the Netherlands, 2010; publication no. 2010/04.

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A considerable number of people are overweight or obese. This is because many people comparatively eat too much and move too little. Apart from this, it has been established that too little physical activity leads to a high burden of disease and death in the population. All the more reason then to encourage people to take part in sufficient physical activity. Until recently attention tended to focus on influencing behaviour by providing information and promoting participation in sport. The conviction is now steadily gaining ground that the layout of the living environment can also encourage a greater degree of physical activity. Also acting on behalf of her colleagues at the Ministry of Transport, Public Works and Water Management, and the Ministry of Health, Welfare and Sport, the Minister of Housing, Spatial Planning and the Environment therefore requested the Health Council of the Netherlands to produce an advisory report on the role of the physical environment in supporting and encouraging a physically active lifestyle.

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### Living environment further specified

Even though the minister has only asked about the influence of the built environment, the Committee specifically points out that the term living environment is much broader in scope and also includes psychological, sociocultural, political and economic aspects. The Committee takes the view that it is always necessary to consider the interrelationships between these aspects in order to develop plausible and practicable ideas. Having said this, the Committee restricts itself in this

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advisory report to the ‘built’ environment, as the ministers requested. It understands this to mean the spatially laid out, built and unbuilt living environment, at the micro-level (in and around houses and other buildings), meso-level (district, city and region) and the macro-level (national).

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### **Scientific literature organised and assessed**

The nature of research into the relationship between the built environment and the physical activity of people is extremely wide ranging. For example, as a rule researchers into mobility mainly give precedence to finding ways of reducing the use of cars. In public health the main focus is on psychosocial factors, sometimes in combination with aspects of the built environment, that could affect physical activity. Moreover, recreational activity and sports originally received the most attention.

However, in recent years researchers have also been studying how factors in the built environment affect daily physical activity. The Committee makes a distinction in this regard between determinant research (in which relationships between specific forms of physical activity and characteristics of the built environment play a key role) and intervention research (which focuses on how changes in the environment affect physical activity). Three important forms of physical activity are considered separately: active mobility patterns (daily cycling and walking to school, work or the shops), physical activity at school and work, and physical activity and sports during leisure time. Where possible, the Committee also focuses separately on young people, adults and people at a low socio-economic level or from ethnic minority groups. The Committee adopted commonly used international standards for scientific evidence in its assessment of the quality of research results. However, it points out that research at the highest methodological level is often difficult to achieve in the present case.

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### **Little hard evidence but ample opportunity**

Although various characteristics of the built environment appear to offer opportunities for increasing physical activity among people, the Committee concludes that thus far only a few of those potential relationships have been backed up by strong scientific evidence. Short-term effects of some minor alterations in the school and workplace environment have been clearly demonstrated, such as markings on school playgrounds and prompts indicating the location of stairs. According to the Committee, an important finding that emerges from this is that

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changes in the physical environment can indeed lead to changes in physical activity.

Given what is currently known, it appears to a certain extent plausible that a range of other environmental variables would likewise have a positive effect on the physical activity of young people and adults. Such changes include maintaining or restoring small-scale facilities in the district, traffic-safe footpaths, cycling paths and informal areas for play and recreational walking. An attractive environment also appears to have an encouraging effect.

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### **Utilise interfaces with other policy areas**

It is interesting from the practical point of view that interfaces exist with various other areas of policy. For example, current mobility policy is intended to limit the travelling time of the Dutch population while simultaneously assuring traffic safety and a clean living environment. Part of the policy aims to encourage cycling, for example. Other measures are conceivable that would operate in parallel with the intended objectives of these policy areas. In such cases a plausible connection could provide an adequate starting point from the policy point of view. However, in the Committee's opinion this does not affect the desire to know which measures have the greatest effectiveness and efficiency. These questions call for further research that is methodologically more capable of standing up to critical analysis.

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### **Suggestions for further research**

The Committee mentioned the complex relationship between the numerous factors that influence physical activity. Taking these into account, the Committee is of the opinion that, amongst other things, further research to reinforce the fundamentals is required by means of:

- further interdisciplinary and international cooperation between planners and behavioural experts
  - developing conceptual models that show the relative importance of individual, sociocultural and environmental factors and lead to verifiable hypotheses
  - developing standardised and validated methods for measuring the physical environment and physical activity
  - improving the design of research, especially by conducting longitudinal research projects and (natural) experiments to gain an understanding of the considerations and motivations that encourage people to be physically active or otherwise
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- including proper checks in the design of research to prevent confounding resulting from self-selection
- not losing sight of the fact that the relevant outcome for health policy is the total amount of physical activity of individuals
- also conducting research into the connection between changes in the environment over time and changes in physical activity.