

## **Cycling to Health**

### **The Netherlands on the Move!**

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### **Summary**

The key objective of The Netherlands on the Move!, an action program of NOC\*NSF in co-operation with many other major national, regional and local organisations, is 'to realise a substantial increase in the number of Dutch citizens who enhance their health through an active lifestyle which includes regular exercise'. The programme focuses on improving the link between scientific research and the practicalities of health promotion by translating scientific research into effective projects.

In 1998, a norm for the amount and intensity of regular exercise needed to enhance health was agreed upon by several experts. Half an hour of moderately intensive exercise on five, preferably all days of the week is the basic norm for adults and seniors. Internationally applied norms such as those from the ACSM and the WHO/FIMS were used to reach this consensus. The norm is specified for youth, adults and seniors.

The healthy exercise norm, one of the key products of the Netherlands on the Move!, is the basic guideline for the promotion of cycling in the Netherlands. Even though the Netherlands is well known for its high percentage of people who ride bicycles, 60% of the Dutch population does not meet the norm for healthy exercise. The promotion of cycling to work and cycling as a leisure-time activity are an important part of the new strategy to promote health-enhancing physical activity among adults. In this strategy, several national organisations are working together in the Netherlands on the Move!.

## **1. The Netherlands on the Move!**

### **1.1 Introduction**

*The Netherlands on the Move!* is the action programme with which the Netherlands Heart Foundation (NHF), the Dutch Cancer Society (DCS), the Netherlands Olympic Committee \* Netherlands Sports Confederation (NOC\*NSF), the Youth on the Move Foundation (YotM) and many others are taking up the fight against the poor level of physical activity amongst the Dutch population. These organisations have joined forces and are working in various ways to (get) keep people involved in sport and exercise with the primary goal being the promotion of health. To date, around 300 organisations have signed the charter of *The Netherlands on the Move!*, including 82 national organisations and 37 municipalities. Collectively, they represent *The Netherlands on the Move!* network.

## **1.2 Objective**

*The Netherlands on the Move!* aims to realise a substantial growth in the percentage of the Dutch population that, through an active lifestyle with the emphasis on regular and sensible exercise, have a positive influence on their own health.

Since the start in 1995, *The Netherlands on the Move!* has been targeting persons 55 years or older with or without a chronic illness. In 1997, youth as a target group was added to the programme, and in 1999 a campaign targeting adults commenced.

*The Netherlands on the Move!* will be an ongoing programme until 2003. The project office of *The Netherlands on the Move!* is located at NOC\*NSF. The primary tasks of the office are co-ordination of the sub-programmes and network meetings, implementing various projects, generating publicity and attracting funding.

## **1.3 Together towards the goal**

*The Netherlands on the Move!* has reached the half-way point of the campaign period that runs from 1995 to 2003. In the last few years, many people and organisations have joined *The Netherlands on the Move!*. Under the motto of 'more people exercising sensibly and, most importantly, pleurably', they are collectively active. The knowledge and experience that has been gained up until now forms the basis of a healthy future.

*The Netherlands on the Move!* is about more than just sport. In health terms, activities such as gardening, dancing, using stairs (instead of taking the lift) and cycling (instead of using the car or bus) are also important. *The Netherlands on the Move!* can be compared to a national park which contains many different gardens. The various gardeners that work there have realised that they all use the same type of soil, so they can learn a lot from each other, and achieve more together.

## **2. Dutch Healthy Exercise Standards**

### **2.1 The Healthy Exercise Norm**

Healthy exercise means physical activity that is pleasurable as a regular part of an active lifestyle. The Dutch standards for promoting health enhancing physical activity, in short 'Dutch Healthy Exercise Standards', were based on exercise guidelines that are used internationally (ACSM and the WHO/FIMS).

#### **Youth** (younger than 18)

One hour of moderately intensive physical activity daily, which should be targeted at improving or maintaining physical fitness (strength, flexibility and co-ordination) twice a week.

### ***Adults (18-55 years)***

Thirty minutes of moderately intensive physical activity on at least five, but preferably all days of the week.

### ***Seniors (55 or older)***

Thirty minutes of moderately intensive physical activity on at least five, but preferably all days of the week. For those who are inactive, with or without a physical limitation, every extra amount of physical exercise is beneficial.

### **The following points apply to all age groups:**

- Duration and intensity of physical activity are interchangeable (30 minutes walking instead of 15 minutes running or 30 minutes of moderately intensive exercise five days per week instead of 30 minutes of intensive three days per week).
- What is defined as moderately intensive physical activity can differ for young people, adults and seniors.
- Improving fitness requires higher intensity physical activity than is required for enhancing health.
- For people with a physical limitation or a chronic illness, personalised exercise guidelines are recommended. Exercising makes a positive contribution to the health of very many people, also during rehabilitation and recovery.
- General advice: integrate physical activity into the daily routine! It's not just about participating in (organised) sport.

### **Information on intensity**

Intensity can be expressed as a multiple of the amount of energy used during rest (RMB). The metabolism is set at 1 while resting, which is expressed in MET. An activity that is 2 MET is equivalent to 2 x RMB, while a 4 MET activity is equivalent to 4 x RMB.

Moderately intensive activity does not mean the same MET value for everybody (age, gender and level of fitness can play a role).

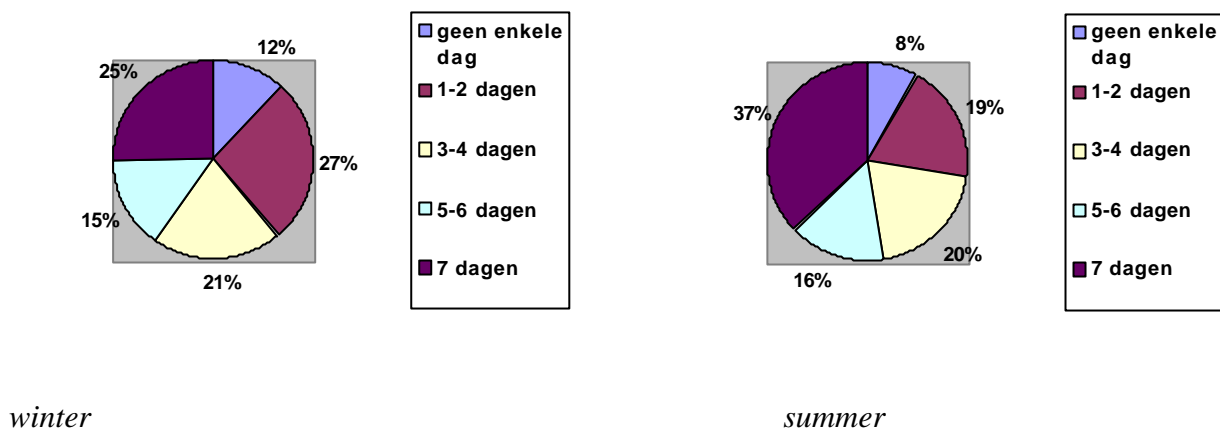
Moderately intensive physical activity means for:

- youth: approx. 5 MET (walking, cycling, walking up stairs) to 8 MET (running, running up stairs);
- adults: approx. 4 MET (walking 5 km/hour) to 6.5 MET (cycling 16 km/hour);
- seniors (55 or older): approx. 3 MET (walking 4 km/hour) to 5 MET (cycling 10 km/hour).

## **2.2 The Netherlands moves more and more!**

At the beginning of the 1990s, alarming figures from the Central Bureau of Statistics revealed the poor level of exercise participation in the Netherlands. Over 75% of the Dutch adult population could be described as inactive, which represents a serious health risk. A recent study by the TNO Centre for Occupational Safety and Health presented a more positive picture: during winter, 60% of the Dutch adult population exercises for 30 minutes on less than five days a week while in the summer this figure is 47%. We therefore seem to be on the right track.

**Figure 1:**



*Results of the TNO survey, summer 1998, based on a random sample of the Dutch population aged 16 years or older (n=4000): percentage of Dutch population that exercise moderately for at least 30 minutes per day, broken up into total number of days per week (winter is on the left and summer on the right).*

### 3. Promotion of cycling

Physically active forms of transport, such as cycling, offer significant health gains through the reduction of the ill effects of motorised transport and the utilisation of the health benefits of increased physical activity. Strategies to design and engineer a modal shift from motorised to physically active transport should be effectively pursued. In defining their own strategies and actions for the national promotion of transport cycling, countries may use the following strategic directions (Oja, P. and I.Vuori, 2000).

#### 3.1 Examining the issues involved

The nature of transport cycling in terms of frequency, duration and intensity suggests that, in principle, such activity can contribute significantly to people's health-enhancing physical activity. On the other hand, the current practices of such activity are sufficient for health gains in only a few EU countries, and very minimal in most, particularly in the southern Member States. Furthermore, the trends in physically active transport indicate a rather dramatic decline over the past few decades.

Knowledge of the health potential of active transport, factors influencing the choice of transport mode and attitudes among many European populations, as well as increasing experiences of local, regional and even some national promotional efforts, suggest that the use of physically active transport can be substantially increased through appropriate policies, strategies and actions. Therefore, the development of target-oriented national strategies is justified.

A major issue affecting such development is the overwhelming and increasing role of car culture in the transport scene. The car is the first choice of transport for many people and for many reasons. This culture creates many obstacles for the promotion of cycling. The social status is low in comparison to driving a car, and the physical environment is often non-conducive, if not hostile, to cycling. These obstacles need to be overcome in order to make real progress towards more active transport.

### **3.2 Identifying strategic objectives**

One key strategic objective in the promotion of physically active transport is to make cycling contribute towards sustainable transport. Together with public transport it constitutes an essential element of energy-efficient, low resource-consuming means of transport. It also contributes to the reduction of congestion and pollution, the enhancement of the local environment, the improvement of quality of life, increased accessibility, injury prevention and social equity. Urban design, land use planning and traffic planning are critical in ensuring an environment conducive to sustainable transport.

Another fundamental strategic objective is to achieve a modal shift from car driving to cycling. A substantial shift requires a reduction in car dependence and acceptance of user-pays-the-cost policy. A reduction in the need to travel by car can be effectively achieved by proper urban design and land use planning for short and accessible connections to trip generator locations, and by comprehensive public transport with effective linkage to cycling.

### **3.3 Defining targets**

Effective strategy includes well-defined targets. It is advisable to set them in quantitative, measurable terms that correspond to political will and available conditions. Headline targets can include defined increases in the proportion of walking and cycling trips of all journeys within a given time period. Supplementary targets may include quantitative increases in walking and cycling according to journey distances, journey purposes, infrastructure, facilities and promotion.

### **3.4 Establishing consensus**

Comprehensive strategic planning and implementation requires active collaboration and partnership between several parties and their consensus on key issues and roles. The main actors are the health, education, sports, transport and land use authorities. Other important collaborators include the traffic safety authorities, transport operators, the health care sector, the bicycle industry as well as various voluntary and consumer organisations promoting exercise, sports, recreational activities and sustainable transport.

### **3.5 Taking action**

Creating a pro-cycling culture is one of two main action areas for implementing the defined strategies and objectives. To obtain a significant level of growth in cycling requires an acceptance of cycling as a desirable transport mode among the public, professionals and transport providers. Well-planned communication programmes with clearly identified messages, target groups and delivery channels, incentives and regulatory and legal measures are important means in establishing such a culture.

Promoting cycling without the provision of the proper environment, conditions and facilities may become futile. Effective interventions include land use and transport planning, traffic calming and speed reduction, highway design and transport engineering with cycle paths and networks, linkage of public transport with cycling, cycle parking, traffic signals and signs, road lighting and other conditions and vehicle design. A comprehensive cycling audit ensures the consideration of the needs of cyclists in all relevant development schemes.

### **3.6 Obtaining funding**

In order to develop and maintain pro-cycling infrastructure, considerable funding from national and local transport authorities is required.

A fixed proportion of their total annual budget for the infrastructure would ensure the realisation of the set strategies and targets. Further funding can be obtained from other collaborators through mutual ownership of the strategic plan.

### **3.7 Advocacy and lobbying**

Persistent advocacy and lobbying by the principal acting parties will ensure the necessary collaboration, partnership and ownership for effective networking. Political sensitivity, understanding media power, broad cultural penetration and supporting evidence are important elements in this work.

### **3.8 Monitoring and evaluation**

It is imperative to integrate monitoring and evaluation in the cycling strategy. They provide the necessary evidence to assess the efficacy, cost-effectiveness and feasibility of the adopted strategies and actions.

## **4. Cycling to health**

The healthy exercise norm, one of the key products of the Netherlands on the Move!, is the basic guideline for the promotion of cycling in the Netherlands. Even though the Netherlands is well known for its high percentage of people who ride bicycles, 60% of the Dutch population does not meet the norm for healthy exercise. The promotion of cycling to work and cycling as a leisure-time activity are an important part of the new strategy to promote health-enhancing physical activity among adults. In this strategy, several national organisations are working together in the Netherlands on the Move!.

### **4.1 Benefits of cycling**

Cycling is an excellent form of exercise. For many Dutch people, cycling is a normal part of their daily life and easy to integrate into their exercise routine. Cycling benefits the individual and companies, the environment, the economy and society as a whole.

A number of benefits for the individual:

- Cycling is fast
- Cycling is inexpensive
- Cycling is healthy

### **4.2 Cycling to work**

The structured provision of exercise activities at the workplace offers good opportunities for stimulating those employees who have 'no desire' to exercise in their free time into becoming more active. Cycling between home and work as well as exercising during (lunch) breaks bring about the most significant health effects amongst the least active employees.

For people that live within a radius of approximately 10 kilometres from their work, the bicycle is an excellent way of getting to and from work. Despite that, insufficient people in this group take advantage of it as a means of transport.

Reason enough for the initiative 'cycling to work'.

#### **4.2.1 Benefits for the company**

An increase in the number of employees who cycle to work benefits a company in a number of ways:

- *Absenteeism due to illness falls:* It has been proved that cycling improves health, condition and resistance. This could possibly lead to a reduction in the number of people reporting sick, greater job satisfaction, being better able to cope with stress and work pressure and higher level of labour productivity.
- *The accessibility of the company increases:* The flow of cars falls.

- *The costs of parking facilities falls:* Fewer parking spaces are required, hence reducing construction and maintenance costs.
- *The green image of the organisation is enhanced:* By encouraging its employees to cycle, the organisation makes a contribution to preserving the environment by reducing the level of car use.
- *Taxation benefits:* The employer can deduct the purchase cost of a bicycle from the profit and the employee is required to pay no or little income tax under a bicycle from the company scheme.

#### **4.2.2 Barriers for employees**

Research has revealed that on average, Dutch people cycle 30 minutes between home and work (8.18 km). Still, only around a quarter of all workers cycle to their workplace. Those employees who do not cycle to work have both plausible and less plausible reasons for their behaviour. Frequently heard reasons include:

- Distance between home and work is too great
- Costs too much time
- Impossible because of type of work
- Inappropriate facilities at work (changing room, shower, bicycle shed)
- Weather is always bad
- Already sporty enough / does not like sport

Despite the fact that the bicycle is not always a good alternative form of transport, there appears to be a significant group (14%) who, given the distance between home and work and the nature of their work, could certainly use the bicycle to travel to work.

#### **4.2.3 Possible activities**

The activities that could be developed to promote cycling to work can be divided into measures that offer benefits and measures that impose limitations.

Measures that offer benefits:

- Bicycle from the company scheme
- Payment of costs of bicycle and maintenance
- A moving house bonus or a bonus for living within cycling distance from work
- Safe and covered bicycle shed
- Changing room and showers
- Company bicycles
- Company location that is easy to reach by bicycle
- Company cycle clothing, wet weather clothing and bicycle insurance

Measures that impose limitations:

- Targeted payment of travelling costs (for cycling and public transport)
- Paid parking for cars
- Limiting parking space
- Minimising number of company (lease) cars
- Travelling for business purposes to be done, in principle, using public transport or bicycle
- Private cars not to be used for business trips

Other means to stimulate bicycle use include:

- Enthusiastic co-ordinator of bicycle policy

- Company bicycle tours or a bicycle club
- Bicycle competitions with nearby companies
- Use of bicycle by management as an example to employees
- Bicycle initiative involving a number of companies, with a set sum of money going to a charity for each kilometre cycled
- Establishing a goal number of kilometres to be cycled collectively
- Company bicycle day
- (Joint) sponsorship of a cycling club, team or a cycle race/non-competitive tour.

## **References**

- Oja, P. and I.Vuori, Promotion of transport walking and cycling in Europe: Strategy Directions, UKK Institute, 2000).