

The public health goals of WHO for increasing physical activity are achievable

Key Findings

- Physical activity as a hobby has become more popular in Finland during the last decades, but physical activity while commuting and the physical strenuousness of work have become less.
- Younger and highly educated people engage in more physical activity than older and less educated people.
- Only approximately one out of five comprehensive school and upper secondary school students and one out of ten vocational school students engages in physical activity resulting in shortness of breath and sweating for the recommended minimum of seven hours a week.
- If the physical activity trends keep their current course, the physical activity goals set by WHO will be reached.
- What is more challenging is the national objective, which is to double the percentage of the population partaking in sufficient physical activity.

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INTRODUCTION

The World Health Organization (WHO) has published its action plan for the prevention and control of noncommunicable diseases for 2013–2020. The action plan includes proposals for health policy and practical action. The objective is for the member states to reach as many as possible of the nine international targets pertaining to the prevention and treatment of noncommunicable diseases by the year 2025. The attainment of the said targets is being monitored through 25 indicators, which represent risk of premature mortality, levels of noncommunicable disease risk and protective factors as well as the potential for and realisation of prevention and treatment. The baseline of the monitoring is year 2010.

The WHO action plan is primarily focused on four important disease groups: cardiovascular diseases, cancer, diabetes and chronic respiratory diseases. Disease prevention focuses on lifestyle factors: smoking, unhealthy diet, lack of physical activity, and harmful use of alcohol.

An evaluation has been conducted in Finland on the current state and previous development of noncommunicable diseases and their risk factors to estimate how realistic the targets set by WHO are for Finland. At the same time, national challenges have been identified along with possibilities for improving the prevention of noncommunicable diseases.

This “Data Brief” publication reports WHO’s objective for increasing physical activity (objective 3) and the respective indicators.

PHYSICAL ACTIVITY IN FINLAND

Physical activity has become increasingly popular as a hobby in the last decades. On the other hand, physical activity while commuting and the physical strenuousness of work have declined. A total of 33% of men and 27% of women engaged in physical activity (strenuous intensity physical activity at least 3 h/week) in 2012. A total of 12% of men and 20% of women reported being physically active on the way to/from work (at least 30 min./d). A total of 36% of men and 21% of women reported that their work was physically demanding. Younger and highly educated people engaged in more recreational physical activity than older and less educated people. There were also geographical differences.

Physical activity in free time has not increased as systematically amongst comprehensive school, upper secondary school and vocational school students as amongst adults (Table 1). Physical activity in free time increased between 2001 and 2013 solely among comprehensive school-aged and upper secondary school-aged girls. In 2013, if gauged solely by physical activity resulting in shortness of breath and sweating, only about one out of five comprehensive school and upper secondary school students and one out of ten vocational school students achieved the recommended quota of 7 hours a week. Boys reported engaging in physical activity in their free time more often than girls.

WHO targets for 2010–2025

1. A 25% relative reduction in risk of premature mortality from cardiovascular diseases, cancer, diabetes and chronic respiratory diseases.
2. At least 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context.
3. A 10% relative reduction in prevalence of insufficient physical activity.
4. A 30% relative reduction in mean population intake of salt/sodium.
5. A 30% relative reduction in prevalence of current tobacco use in persons aged 15+ years.
6. A 25% relative reduction in the prevalence of raised blood pressure.
7. Halt the rise in diabetes and obesity.
8. At least 50% of eligible people receive drug therapy and counselling to prevent heart attacks and strokes
9. An 80% availability of the affordable basic technologies and essential medicines required to treat major non-communicable diseases.

WHO indicators for increasing physical activity

The percentage of adolescents not engaged in sufficient physical activity. The definition of sufficient physical activity: a minimum of 60 minutes of moderate-to-vigorous intensity physical activity per day

The age-standardised percentage of adults (18+) engaged in insufficient physical activity. The definition of sufficient physical activity: a minimum of 150 minutes of moderate intensity heavy or 75 minutes of vigorous physical activity per week

It should be noted that these indicators cannot be created from the Finnish information sources exactly in the same form.

THE PHYSICAL ACTIVITY GOALS SET BY WHO ARE ACHIEVABLE

The action plan of WHO aims to reduce the percentage of the population partaking in insufficient physical activity by 10% from the 2010 level by the year 2025. This report analyses how well this goal can be achieved as divided between physical activity in free time (strenuous intensity physical activity for at least 3 h/week) and physical activity while commuting (at least 30 min/d). In physical activity, WHO’s goal would mean decreasing the percentage of the population not exercising enough from 67% to 60% for men and from 73% to 66% for women (Figure 1). This goal responds relatively well to the change in activity trend between 1982 and 2012 and is achievable, should this trend continue.

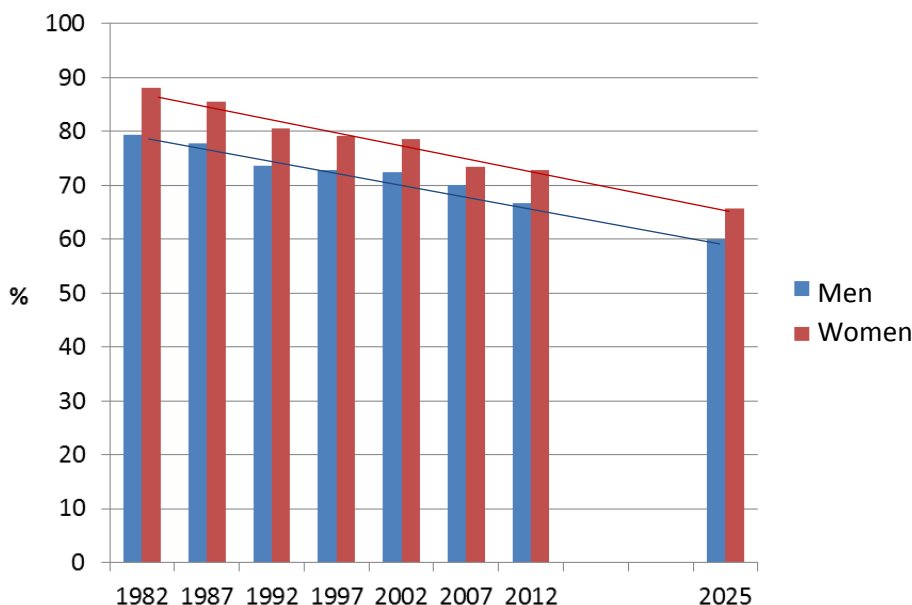


Figure 1. The percentage of those in the 25–64 age bracket not engaged in sufficient fitness-enhancing physical activity in their free time (less than 3 h/week) and the projection in accordance with the WHO goal for 2025 (10% decrease).

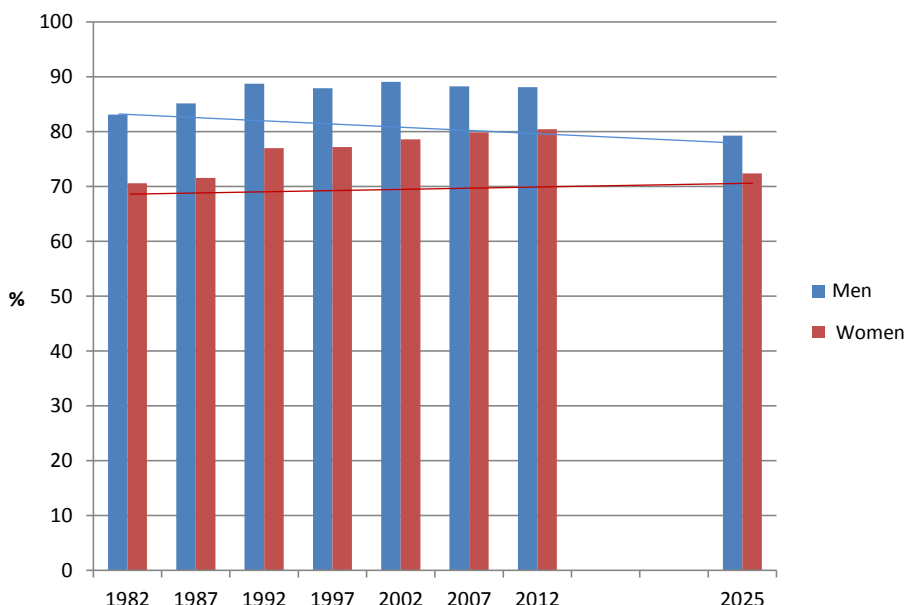


Figure 2. The percentage of those in the 25–64 age bracket not engaged in sufficient physical activity while commuting (less than 30 min/d) and the projection in accordance with the WHO goal for 2025 (10% decrease).

In physical activity while commuting, reaching the goal would mean reducing the percentage of those not exercising enough on their way to/from work from 88% to 79% for men and from 80% to 72% for women (Figure 2). Reaching this goal requires a special contribution to increasing physical activity whilst commuting in order to achieve the 10% decrease in the number of inactive commuters. The current trend projects increasing inactivity while commuting.

Among children and adolescents, reaching the goal would require decreasing the percentage of those exercising six or fewer hours in their free time from 79% to 71% for boys in comprehensive school, from 85% to 77% for girls in comprehensive school, from 75% to 68% for boys in upper secondary school, from 85% to 77% for girls in upper secondary school, from 86% to 77% for boys in vocational schools and from 94% to 85% for girls in vocational schools (Table 1). The goal set by WHO is achievable, especially in comprehensive schools and upper secondary schools, if the current trend 2010-2013 continues.

Table 1. The incidence of insufficient physical activity in free time among the 8th and 9th class pupils of comprehensive schools, 1st and 2nd class pupils of upper secondary schools, and 1st and 2nd class pupils of vocational schools, and the projection in accordance with the WHO goal for 2025 (10% decrease). Insufficient physical activity was defined as the percentage of those who reported fewer than seven hours of physical activity resulting in shortness of breath and sweating per week.

	2000/2001	2002/2003	2004/2005	2006/2007	2008/2009	2010/2011	2013	2025
Comprehensive school								
Boys	81	81	81	81	81	81	79	71
Girls	92	91	91	89	89	88	85	77
Upper secondary school								
Boys	76	78	78	77	79	77	75	68
Girls	90	90	89	89	88	88	85	77
Vocational school								
Boys	–	–	–	–	87	87	86	77
Girls	–	–	–	–	95	95	94	85

NB. Material pertaining to vocational schools collected since 2008.

Physical Activity Indicators

Physical activity by the adult population (25 to 64) has been queried as part of the national **FINRISK Study** (www.thl.fi/finriski), separately measuring occupational physical activity, physical activity whilst commuting and physical activity in free time, and calculating a total physical activity index. In these analyses, the subjects reporting a minimum of 3 hours of weekly physical activity in free time resulting in shortness of breath, or at least 30 minutes of daily physical activity while commuting, or strenuous physical daily work were labelled as physically active. The confusing effect of age and area has been taken into account in these analyses. The unemployed have been excluded from occupational physical activity and physical activity whilst commuting analyses.

Physical activity among children and adolescents was measured as part of the school health survey conducted by THL. The survey is circulated every other year among approximately 200,000 8th and 9th class pupils in comprehensive schools and 1st and 2nd graders in upper secondary schools and vocational schools. Compatible data have been collected at comprehensive schools since 1996, at upper secondary schools since 1999 and at vocational schools since 2008. In the analyses of this survey, the students reporting a maximum of six hours per week of physical activity resulting in shortness of breath and sweating in their free time were considered physically inactive.

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DISCUSSION

If the changes in the trends pertaining to physical activity in free time, occupational physical activity, and physical activity while commuting will continue as currently, the goals set by WHO for the physical activity of adults will be reached. If the free-time physical activity trend remains the same, the goal set by WHO will be reached regardless of changes taking place in occupational physical activity or physical activity while commuting.

For children and adolescents, the goals set by WHO (1 h per day of total vigorous physical activity) can also be reached, even though the trend is conservative compared to adults. In addition to this, monitoring the implementation of the recommendations for children and adolescents requires more comprehensive and diverse indicator data.

A special challenge to the meeting of these targets is posed by those population groups with the least physical activity: older generations, the minimally educated, and the rural population. The differences in physical activity amongst various population groups are in line with WHO's other non-communicable disease (NCD) indicators and hence affect, in part, the differences in prevalence and mortality rates between various population groups. However, there are no notable differences in the incidence of insufficient physical activity between genders, which is good with respect to international comparison and reflects the objectives of WHO.

Increasing physical activity whilst commuting will be the greatest challenge, due to the increasing number of cars and the rapid changes in working life. Increasingly, work includes working from home or working part-time, in which case a daily commute is not even available. As a result of the changing age structure of the population, an even greater part of the population is formed by pensioners, which increases the importance of physical activity in free time and more active promotion of the same.

Thanks to the Finnish population studies, time trends can be followed back over 40 years, but the data thus provided do not fully correspond with the classification in accordance with the current recommendations on physical activity. The development of survey methods based on the recommendations on physical activity should be continued as part of physical activity monitoring.

There are many national projects promoting physical activity in progress in Finland, supported by the Ministry of Social Affairs and Health and the Ministry of Education and Culture. In addition, the implementation programme of the national strategy on physical activity is at the start-up stage. The national objective is to double the number of inhabitants engaged in sufficient health-enhancing physical activity by the year 2020, which poses a greater challenge than reaching the goals set by WHO. Nevertheless, there are sound reasons for this objective, for even if we were to reach the goals set by WHO, the number of inhabitants engaged in sufficient health-enhancing physical activity would still form less than half the population.

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