

# SEDENTARY BEHAVIOUR

## What is sedentary behaviour?

Sedentary behaviour refers to activities that require very low energy expenditure and where sitting or lying is the dominant posture<sup>1</sup>.

Young people can accumulate substantial sedentary time in their lessons at school. During leisure time, typical sedentary behaviours among youth include watching television, taking motorised transport, playing passive video games and surfing the internet.

Many health outcomes associated with sedentary behaviour occur independent of physical activity<sup>2</sup>. This means that even highly active individuals are susceptible to the negative health effects of time spent being sedentary.

## Sedentary behaviour during adolescence

Sedentary behaviour is an important risk factor for physical, psychological and socio-emotional health among youth.

Young people who are highly sedentary have greater fat mass, higher BMI and an increased risk of being overweight or obese, irrespective of their levels of physical activity when not sedentary<sup>3,4</sup>.

Among adolescents, time spent watching TV has been linked to substance use<sup>5</sup>, reduced self worth and self-concept<sup>6</sup>, reduced bone health<sup>7</sup>, increased risks for markers of metabolic syndrome and cardiovascular disease<sup>7</sup>, poor pro-social behaviour, increased aggression, reduced academic achievement<sup>8</sup>, depression and reduced quality of life<sup>9</sup>.

Crucially, sedentary behaviours track from childhood to adolescence and into adulthood<sup>10</sup>. Efforts to reduce sedentary behaviours therefore need to focus on children and young people. However, only a small group of countries (Australia, Canada, Finland, France, New Zealand, UK and USA) have developed guidelines intended to limit the negative health effects of sedentary behaviours among youth<sup>11,12</sup>. With most stating that adolescents should spend no more than 2 hours per day engaging in sedentary screen-based activities such as TV viewing.

## Policy recommendations

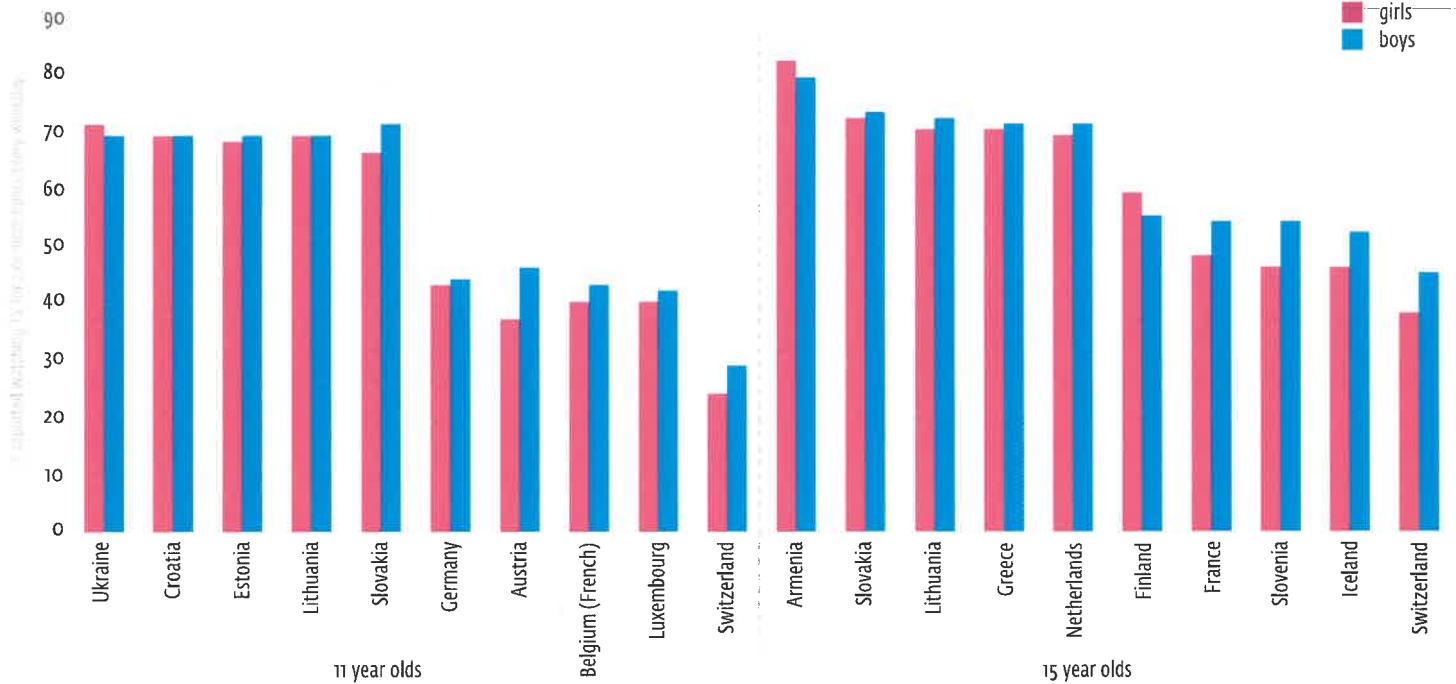
Policy makers in areas such as health, education and welfare should be aware of the importance and benefits of reducing sedentary behaviours among youth. Effective strategies for reducing the time that young people spend being sedentary include interventions that support active transport and active play within schools, families and communities<sup>4,13</sup>.

- Instead of taking the car or bus, young people should be encouraged to walk or cycle to school. Active transport needs to be safe and accessible for all.
- Schools should provide facilities that allow children to spend their time outside of the classroom engaged in active play with their peers.
- School policies should ensure that regular opportunities for physical activity are provided as part of the learning experience. Policy-makers should support schools to limit extended periods of sitting for pupils.

# HBSC findings

In the HBSC 2009/10 international survey, young people were asked how many hours per day they watch TV (including videos and DVDs) in their spare time. The findings presented here are the proportions of 11 and 15 year olds who reported watching TV for 2 or more hours every weekday. Results are limited to the top and bottom five countries per age group.

## An overview of adolescent sedentary behaviour



## Future research needs

Research is needed to assess the impact of limiting the duration of single bouts of sedentary behaviour vs. the impact of limiting total time spent sedentary. This would help inform the development of more effective interventions and support governments in setting national guidelines.

Future studies should assess the extent to which the negative health consequences of TV watching are due to TV's impact on eating patterns, sedentary behaviour, or both.

The most commonly studied sedentary behaviours in young people are screen-based recreational activities such as watching TV and computer use. Future research should examine a wider range of activities including time spent sedentary when reading, travelling, socialising and using new media devices such as tablets and smartphones.

Most studies of sedentary behaviour rely upon self-report survey data of screen-based activities. Work is needed to assess the validity and reliability of self-report measures and to extent the types of sedentary behaviours measured.

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