



Neighbourhood Income Affects Obesity

What is this research about?

For thirty years, childhood obesity has been on the rise in most developed nations. In Canada alone, the number of overweight children has doubled from 13% in the late 1970s to 26% in 2004. This is an especially troubling fact since obesity often lasts into adulthood and has an impact on a person's long-term health.

Research is starting to show that there's a link between obesity and the average income of the neighbourhood where a child lives. Neighbourhoods, after all, are social and physical spaces that structure a child's day; they provide opportunities for her to take part in activities that can promote or prevent weight gain. A disadvantaged neighbourhood may limit a child's access to healthy food. It may also inhibit her access to safe places for recreation, like parks and playgrounds. And as she grows older and gains more freedom of mobility, her neighbourhood may play an even greater role in shaping her weight.

Nevertheless, to date there hasn't been a lot of research on the link between neighbourhood income and child obesity.

What you need to know:

Children who grow up in poor neighbourhoods are more likely to be overweight than children who come from neighbourhoods that have higher incomes.

What did the researchers do?

Researchers in British Columbia looked at the impact of neighbourhood income on the body mass index (BMI) of a cohort of children between the years 1994 and 2002. The children being studied were in the process of moving out of early childhood and into adolescence. (By the end of the study, the oldest child was 11 years of age.) The researchers drew some of their data from the Canadian National Longitudinal Survey of Children (NLSCY). They also used Census data to determine neighbourhood income. This was the first study to take a "longitudinal" approach that looked at children over a large span of time.

What did the researchers find?

The neighbourhood where a child lives has an impact on her weight between early childhood and adolescence. Children who live in the “most poor” neighbourhoods are more likely to be overweight than children from “middle income” neighbourhoods. Those who grow up in more affluent surroundings, however, don’t necessarily experience greater health benefits. In other words, poverty has a larger effect on health than affluence. The researchers also found that a neighbourhood’s characteristics may have a greater influence as children get older. (The older the child, the more freedom she has to interact with her environment.) Children from urban environments are less likely to be overweight than children from rural ones.

How can you use this research?

This research suggests that obesity policies that acknowledge a child’s living conditions may meet with the greatest success. Such policies can reduce obesity in, and prevent disparities between, children from different neighbourhoods, as they age.

This research also raises many questions for future studies. Researchers may wish to look at the effects of moving – from one neighbourhood to another – on a child’s weight. More research is also needed on the health differences between children who grow up in rural and urban areas. Future studies should look at the impact of neighbourhood income on individuals as they move from early adolescence and into young adulthood.

About the Researchers

Lisa N. Oliver is Research Analyst in the Health Analysis Division at Statistics Canada. Michael Hayes is Director of Health Education and Research at the University of Victoria (UVic).

mhayes@uvic.ca

Citation

Hayes, M., & Oliver, L. N. (2008). Effects of neighbourhood income on reported body mass index: An eight year longitudinal study of Canadian children. *BMC Public Health*, 8(16). Available online at <http://bit.ly/1m8A8fa>

Keywords

Body mass index (BMI), Overweight, Children, Social determinants of health, Poverty, Neighbourhood

Knowledge Mobilization at York

York’s Knowledge Mobilization Unit provides services for faculty, graduate students, community and government seeking to maximize the impact of academic research and expertise on public policy, social programming, and professional practice. This summary has been supported by the Office of the Vice-President Research and Innovation at York and project funding from SSHRC and CIHR.

kmbunit@yorku.ca

www.researchimpact.ca

