

Eating behaviours of urban and rural children from disadvantaged backgrounds

Findings from the READI study

Sarah McNaughton

David Crawford

Karen Campbell

Gavin Abbott

Kylie Ball

The importance of healthy eating for the current and future health of children and adolescents is well recognised, however many children consume diets that are not consistent with dietary guidelines¹⁻³. This places them at risk of obesity and other chronic diseases. Understanding children's eating behaviours and the factors that influence such behaviours is an important step towards improving public health.

This study sought to examine differences in obesity-related eating patterns and behaviours amongst children in disadvantaged areas of urban and rural Victoria. In particular, the study examined intake of fruit and vegetables, beverages of various kinds, and non-core foods such as cakes, confectionary and fast foods.

Study design and methods

The study was part of the 'Resilience for Eating and Activity Despite Inequality' (READI) study, which focused on women and children living in disadvantaged areas of urban and rural Victoria, Australia. It involved a mailed survey of women with children aged 5–12 years, which included a food frequency questionnaire completed by mothers on behalf of their children.

The data collection was conducted between July 2007 and June 2008. Seven hundred and seventy one women agreed to provide information on a child in their family. Complete data was available and analysed for 559 children.

Eating patterns and behaviours of children aged 5–12 years

A high proportion of children in the study had poor eating behaviours. Only a third of mothers reported that their children consumed three or more serves of vegetables per day, and two-thirds of mothers reported that their children consumed two or more serves of fruit per day.

A high proportion of 5–12 year-olds in disadvantaged areas of urban and rural Victoria had poor eating behaviours.

A large proportion (66%) of children also consumed whole milk (full cream), despite guideline recommendations that children over two years of age drink reduced fat milk⁴.

Many children also regularly consumed high-energy, nutrient-poor foods such as soft drinks, crisps, confectionary, cakes and fast foods. Just under a third of children consumed crisps 2–4 times per week, and over a third consumed chocolate or confectionary 2–4 times per week.

Differences between urban and rural children

Fruit and vegetables

There were no significant differences between children living in urban and rural areas for intakes of vegetables, fruit or fried potato, however children living in rural areas consumed non-fried potato more often than children in urban areas.

Eating behaviours of urban and rural children from disadvantaged backgrounds

Beverages

Consumption of plain milk, flavoured milk, water and fruit juice was similar amongst urban and rural children. However, children living in urban areas consumed more soft drink than rural children.

Non-core foods

There were no significant differences between children living in urban and rural areas in terms of their intake of potato crisps, salty snack foods, chocolate, confectionary or pizza. However, children living in urban areas consumed significantly more fast food than children living in rural areas.

Children living in rural areas consumed greater amounts of other non-core foods such as cakes, doughnuts and sweet biscuits, and pies, pasties and sausage rolls. These differences in food intake patterns may be in part due availability and accessibility, however further research is required to clarify this.

Significant differences in consumption of foods and beverages among urban and rural children aged 5–12 years

		Urban (n=188)	Rural (n=371)
Non-fried potato	0–1 serve/week	32%	21%
	2 serves/week	25%	26%
	3+ serves/week	43%	54%
Soft drink	0 serves/day	24%	31%
	< 1 serve/day	56%	57%
	1 serve/day	8%	6%
	2+ serves/day	12%	6%
Cake, doughnuts or sweet biscuits	0–3 times/month	32%	23%
	once/week	27%	28%
	2–4 times/week	30%	31%
	5+ times/week	11%	18%
Pies, pasties or sausage rolls	< once/month	27%	22%
	1–3 times/month	51%	45%
	1+ times/week	22%	33%
Fast food	0–3 times/month	70%	80%
	1+ times/week	30%	21%

Where to from here?

The findings of this study provide valuable insights into the eating behaviours of children in low socioeconomic areas in urban and rural Victoria. These will be important to consider when developing and implementing programs to promote healthy eating in disadvantaged areas. The ongoing research at the Centre for Physical Activity and Nutrition will further explore the influences on eating behaviours to inform strategies in this regard.



References

1. Lake, A.A., Mathers, J.C., Rugg-Gunn, A.J. Adamson, A.J. Longitudinal changes in food habits between adolescence (11–12 years) and adulthood (32–33 years): the ASH30 study. *Journal of Public Health*. 2006;28(1):10–16.
2. Harnack, L., Walters, S.A., Jacobs, D.R. Dietary intake and food sources of whole grains among US children and adolescents: data from the 1994–1996 Continuing Survey of Food Intakes by Individuals. *Journal of the American Dietetic Association*. 2003;103(8):1015–9.
3. Munoz, K.A., Krebs-Smith, S.M., Ballard-Barbash, R., Cleveland, L. E. Food intakes of US children and adolescents compared with recommendations. *Pediatrics*. 1997;100(3 Pt 1):323–9.
4. National Health and Medical Research Council. *Dietary Guidelines for Children and Adolescents in Australia*. Canberra: National Health and Medical Research Council, 2003.

Acknowledgements

C-PAN gratefully acknowledges the funding provided by the National Health and Medical Research Council to conduct this project, and the support of the Victorian Health Promotion Foundation. Particular thanks go to all participants in the project.

Contact details for further information:

Dr Sarah McNaughton
Centre for Physical Activity and Nutrition Research
Deakin University
Email: sarah.mcnaughton@deakin.edu.au
www.deakin.edu.au/cpan