



OVERWEIGHT AND OBESITY the hidden role of food insecurity

“National data indicates that obesity is most prevalent amongst those at highest risk of food insecurity”¹

*Obesity is on the increase and in developed countries the prevalence of overweight and obesity among adults is thought to be between 50-65 percent. This is becoming a major public health concern through the link to chronic diseases such as type 2 diabetes, cardio vascular disease, osteoarthritis and various cancers.*²

The emerging paradox – food insecurity and obesity

It seems a contradiction that people who are overweight or obese have poorer access to food. Yet, there is growing evidence that people who are struggling to maintain a healthy weight may be experiencing food insecurity at the same time. In the US, Europe and Australia, the risk of obesity is 20 - 40 percent higher for women who are experiencing moderate levels of food insecurity.

‘Food insecurity without hunger appears to be associated with overweight,’ reported the Food Insecurity Program of the Victorian Health Promotion Foundation.¹

An Australian Institute of Health and Welfare report (2003) on obesity in Australia found that women in the most disadvantaged socioeconomic group had nearly double the rate of obesity (22.6 percent) of those in the most advantaged group (12.1 percent).²

¹ Burns C (2004) A review of the literature describing the link between poverty, food security and obesity with specific reference to Australia. Food Insecurity Program, Victorian Health Promotion Foundation. http://www.vichealth.vic.gov.au/assets/contentFiles/Literature%20Review%20Poverty_Obesity_Food%20Insecurity.pdf

² AIHW (2003) Are all Australians gaining weight? Australian Institute of Health and Welfare Bulletin, Issue 11, Dec 2003

These associations between poverty, food insecurity and obesity mean that more consideration should be given to factors contributing to the current increase in overweight and obesity in order to determine the steps needed to ensure a healthy weight for all.

What is food insecurity?

“Food insecurity exists when people lack choice, fear running out of food, or are forced to make major changes in their preferred eating habits due to economic constraints”.²

One of the main causes of food insecurity is poverty but a number of other factors are involved, including the food supply and access to food.

While many Australians juggle payments of bills, people living in poverty often have to make difficult choices – such as skipping a meal to pay for a child’s textbooks.³

³ Australian Council of Social Service (2005) Poverty - The Facts. http://www.acoss.org.au/upload/publications/factsheets/338__Poverty%20Factsheet.pdf

'The association between poverty and obesity may be mediated in part by the low cost of energy-dense foods and may be reinforced by the high palatability of sugar and fat'⁹

Who's at risk of food insecurity?

A 2004 household survey of three low income suburbs in SW Sydney⁴ found food insecurity in:

- 21.9 percent of households
- 30 percent of households with children
- 45 percent of single parent households.

Who's at risk of poverty in Australia?

In 2006, an estimated 2.2 million people, 11 percent of Australians including 412,000 children, were living below the poverty line*.

- government allowance payments do not compare favourably with the poverty line with income support payments often falling 20-30 percent below the poverty line.⁵
- those living in poverty experience a shortfall between their income and their basic needs.⁵
- the wages of the 'working poor' may be only 30 percent above the poverty line.⁵
- those in the lowest income range spend a greater proportion of their income on food than those in the highest.⁵

Groups at risk of living below the poverty line include single parent families, unemployed households, adults over 65 years living alone, households whose main income is social security and single adults (without children) of workforce age.⁵

* *the most austere line widely used in international research (50% of the median (middle) disposable income.*

How do neighbourhoods play a role?

It is known that low-income neighbourhoods are less favourable to health, but where we live is determined by what we can afford. Low-income neighbourhoods have been found to have more take-away outlets and less fresh food at affordable prices, with one study reporting that low income areas had two and a half times the density of fast food outlets per person.⁶

'Food desert' is a term used to describe neighbourhoods that have a very limited food supply and poor access to healthy food, due to factors such as lack of supermarkets within an acceptable distance and limited access to private and public transport. In a local area with limited transport, the best option to avoid hunger may be to buy energy-dense foods that are easier to carry.

The physical environment can also determine how easy or difficult it is for residents to be active and to maintain a healthy weight. For example, limited access to affordable recreational facilities, lack of well maintained footpaths and urban sprawl all make physical activity less accessible.⁷

4 Nolan M, Rikard-Bell G, Mohsin M and Williams M (2006) *Food insecurity in three socially disadvantaged localities in Sydney, Australia. Health Promotion Journal of Australia* 2006; Vol 17;247-54

5 Australian Council of Social Service (2007) *Australia Fair: Update on those missing out. Australian Council of Social Service* <http://www.australiafair.org.au/public/Publications.aspx?ArticleID=3517>

6 Reidpath D D, Burns C, Garrard J, Mahoney M and Townsend M (2002) *An ecological study of the relationship between social and environmental determinants of obesity. Health and Place* 2002; 8

7 King T, Kavanagh AM, Jolley D, Turrell G, and Crawford D (2005) *Weight and place: a multilevel cross-sectional survey of area-level social disadvantage and overweight/obesity in Australia. International Journal of Obesity*, 1-7

Are foods that help maintain healthy weight affordable to all?

The cost of food is affected by many different factors that can change over time, as seen recently in Australia with the effects of drought, increasing costs of fuel and the introduction of policies to promote the use of biofuels.

Research in the US has shown there is a strong relationship between the rising cost of fruit and vegetables and the development of obesity in children.⁸ The link between limited resources and cost of food is an obvious one - if you can't afford it, you can't eat it, even if you want to.

At the same time, developments in food technology have produced foods high in energy but low in nutrients at low cost to the consumer. Most often these are high in fats and sugars, and low in vitamins and minerals. Over consumption of these cheaper alternatives can lead to rapid weight gain, particularly in people who are not active.

Low energy, nutrient-dense diets are recommended for maintaining a healthy weight. However, a study of French adults found that low energy-dense foods cost substantially more than the more energy-dense foods.⁹

If healthy food choices cost more, this will have a negative impact on the nutritional quality of foods consumed by those most economically disadvantaged. A recent survey of the cost of a healthy basket of food in NSW (Cancer Council NSW, 2007) indicated that a family on an average income would need to spend 22% of their income on groceries. This figure rises to 56% of their income expenditure on groceries for a family in the lowest 25% income bracket.¹⁰

Research has shown that a parent faced with household food insecurity will usually attempt to avoid any children in the family experiencing hunger. People report having enough food to eat but not the kind of food they want to eat, eg, the food choices are limited to cheaper (energy-dense) foods which maintain energy intake, and avoid hunger, at a lower cost. Further reduction in income may result in food deprivation and hunger in households. Continued low energy intake can result in weight loss and under-nutrition and may lead to growth failure in children.^{2, 8}

Access to affordable healthy food needs to be an important consideration in efforts to ensure food security and maintain healthy weight within the population.

*"A causal relationship between food insecurity and obesity has not been established. However several studies have shown that women who are food insecure eat fewer fruits and vegetables and have more nutrient deficiencies compared to women who are food secure."*²

*Those relying on the lowest income are the most vulnerable to an increased burden of disease and have to pay the greatest percentage of their income on food.*⁸

8 Burns C and Friel S (2007) It's time to determine the cost of a healthy diet in Australia. *Australian and New Zealand Journal of Public Health* 2007 Vol. 31, No.4; 363 – 365

9 Drewnowski A, Monsivais P, Maillot M, and Darmon N (2007) Low-energy-density diets are associated with higher diet quality and higher diet costs in French adults. *Journal of American Dietetic Association*. June Vol 107, No. 6

10 The Cancer Council of NSW (2007) *NSW Healthy Food Basket Cost, Availability and Quality Survey* <http://www.cancercouncil.com.au/foodbasket>

Obesity and food security are both listed in the top five priorities of the national and state health departments' nutrition policies.

Rather than treating them as separate issues, it is time to address food security as an important step in the battle against obesity.

WHAT CAN BE DONE...

to address the impact of food insecurity and overweight and obesity?

Improve infrastructure

- influencing planning decisions and the location and type of food outlets in new and existing suburbs
- providing incentives and subsidies for fresh food businesses to establish in low income areas
- providing cheap/free public transport to food outlets
- ensuring adequate food storage and cooking facilities for those in poor-quality housing.

Improving access to staple foods

- consider strategies to reduce cost of fruit and vegetables
- local production of fruit and vegetables through community and school gardens or seedling nurseries
- school breakfast programs
- community cafes
- food co-ops
- food distribution networks
- farmers markets

Developing food systems and policy

- develop a national initiative to regularly assess and monitor the cost of healthy food in Australia and its relationship to low incomes and benefits
- co-ordinated advocacy for food equity, for example the work of the Sydney Food Fairness Alliance
- develop regional food policies including a policy for the Sydney Basin
- limit junk food advertising (especially to children) and promote fruit and vegetables
- develop landuse policies that preserve and sustain urban agriculture
- Advocacy for cross-government action at local, state and federal levels to improve food security
- increase community awareness of problems associated with food security and the relationship to obesity
- advocacy for a living wage and benefits and affordable housing
- advocacy for education and employment initiatives
- influence policy impacting on the pricing of healthy foods
- influence policies relating to types of food available via emergency food relief agencies.

Obesity and food security are both listed in the top five priorities of the national and state health departments' nutrition policies. Food security is included in many local government plans, notably in Victoria¹¹. Rather than treating them as separate issues, it is time to address food security as an important step in the battle against obesity.

DISCUSSION POINTS:

There is much talk of 'lifestyle choices' – but what influences choices? Can everyone afford to make healthy lifestyle choices?

How can initiatives to reduce overweight and obesity include food access strategies?

How to advocate for the need to link welfare and minimum wage policy and healthy living standards, including food security?

What role can urban planning play to enhance healthy food access?



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¹¹ Wood B, Streker P. *Food Security in the City of Port Phillip. Report Part IV: Municipal food security. P 5. Dec 2004*