



What is obesity in young people and why does it deserve attention?

Children and adolescents who have a body mass index (BMI) at or above the 95 centile for their age and sex are considered obese¹. The *worldwide* prevalence of overweight and obese children and adolescents has increased twofold over the past two decades². This statistic *conceals* an even more alarming increase in the prevalence of metabolic syndrome in obese children and adolescents³. Metabolic syndrome, which is a term describing an affliction of adults that was rarely seen in children, describes a multitude of symptoms that can lead to cardiovascular disease and insulin dependent (type 1) diabetes. A child with metabolic syndrome will usually have all of the following symptoms: insulin resistance or type 2 diabetes, high blood pressure and central obesity (or fat around the waist).

The increasing prevalence of overweight and obesity in children poses a couple of problems. The first is that being overweight or obese may affect the psychosocial wellbeing of children and adolescents⁴. Secondly, obese children have a statistically significant increased risk of developing into obese young adults⁵. The increasing prevalence of overweight and obese children may be curtailed with uniform, Australia-

¹ Chinn, S. (2006). Definitions of childhood obesity: current practice. *European Journal of Clinical Nutrition* **60(10)**:1189-1194. Children and adolescents who have a BMI between the 85th and 95th centiles are considered to be overweight.

² Atlantis, E., Barnes, E. H. and Fiatorone Singh, M. A. (2006). Efficacy of exercise for treating overweight in children and adolescents: a systematic review. *International Journal of Obesity* **30**: 1027-1040.

³ Weiss, R., Dziura, J., Burgert, T. S., Tamborlane, W. V., Taksali, S. E., Yeckel, C. W. *et al.* (2004). Obesity and metabolic syndrome in children and adolescents. *New England Journal of Medicine* **350**: 2362-2374.

⁴ Zimetkin, A. J., Zoon, C. K., Klein, H. W. and Munson, S. (2004). Psychiatric aspects of child and adolescent obesity: a review of the past 10 years. *Journal of the American Academy of Child and Adolescent Psychiatry* **43**: 134-150.

⁵ Venn, A. J., Thomson, R. J., Schmidt, M. D., Cleland, V. J., Curry, B. A., Gennat, H. C. and Dwyer, T. (2007). Overweight and obesity from childhood to adulthood: a follow-up of participants in the 1985 Australian Schools Health and Fitness Survey. *Medical Journal of Australia* **186(9)**: 458-460.

wide policies and regulations to promote and instill healthy nutrition and active lifestyles. The projected consequences of not making the attempt to curtail the increasing prevalence are an increase in obesity-related disease, disability, and death⁶.

About the National Children's and Youth Law Centre and this submission

Since its inception, the National Children's and Youth Law Centre has developed a national profile and is recognised as one of few peak national bodies consistently advocating for children and young people. The Centre recognises that obesity in children and young people is an ongoing problem affecting all Australian communities. The Centre uses the *United Nations Convention on the Rights of the Child* as its touchstone for its work and policy development. Article 24 of the Convention, confers on children the right to the highest attainable standard of health. The lack of uniform policy and regulatory initiatives to combat the increasing prevalence of obesity across Australia is preventing Australian children from attaining this standard.

The Centre has designed this *concise* submission with the primary aim of *raising for debate* a number of policy and regulatory initiatives for curtailing the increasing prevalence of childhood obesity.

Encouraging active lifestyles and healthy nutrition in our built environments

There is an increasing body of research indicating a link between the built environment and health. Most studies report a statistically significant positive association between defined aspects of the built environment and obesity⁷. In 2003, for example, researchers in California concluded that factors such as activity-promoting and nutrition-promoting environments, safe and affordable housing, safe, reliable and affordable transportation and a safe and clean environment free of pollutants could be linked to that State's most pressing medical problems⁸. The researchers found that physical activity, for example, was influenced by conditions such as enjoyable scenery⁹, the proximity of recreational facilities, the design of our streets and neighborhoods¹⁰ and

⁶ Murray, C. J. and Lopez, A. D. (1997). Alternative projections of mortality and disability by cause 1990-2020: Global Burden of Disease Study. *Lancet* **349**: 1498-1504.

⁷ Papas, M. A., Alberg, A. J., Ewing R., Helzlsouer, K. J., Gary T. L. and Klassen A. C. (2007). The built environment and obesity. *Epidemiologic Reviews* **29**:129-143.

⁸ Davis, R. and Cohen, L. (2003). Strengthening Communities: a Prevention Framework for Reducing Health Disparities. *The Prevention Institute and The California Endowment* (http://www.preventioninstitute.org/print/strength_draft.html#conclusion)

⁹ Jackson, R. J. and Kochtitzky, C. (2000). Creating a Healthy Environment: The Impact of the Built Environment on Public Health. *Sprawlwatch Clearing House Monograph* (<http://www.sprawlwatch.org/health.pdf>).

¹⁰ Active Community Environments – a factsheet (2000). *Centers for Disease Control and Prevention* Atlanta, GA.

the design of our transportation networks¹¹. Australian developments and streetscapes are only now, and inconsistently, incorporating these features in order to promote child friendly and active lifestyles. To ensure consistency, the Centre proposes:

- 1. harmonised, Australia-wide, planning regulations to ensure developments and existing developments (particularly those that are residential) are designed and built to promote active lifestyles in children and young adults.**

Moreover, there is evidence demonstrating a link between the retail food environment and the prevalence of obesity and diabetes. Adults with ready access to fast food outlets and convenience stores, relative to grocery stores and stores selling fresh produce, are more likely to be obese and to have diabetes¹². It is reasonable to assume that: (i) the dietary behavior of Australian children would also be influenced by the realities of where they live and (ii) studies investigating the link between ready access to fast and convenience foods and the prevalence of obesity and diabetes in Australian children would replicate the result demonstrated in the *Designed for Disease* study¹³. To ensure that the link between the ready access to fast and convenience foods and the increasing prevalence of obesity and diabetes is addressed in Australia, the Centre proposes:

- 2. harmonised, Australia-wide, zoning restrictions on the number of fast and convenience food outlets.**

Regulating advertising on television

The regulation of content on television during broadcast hours designated for children could be an important tool in the attempt to curtail the increasing prevalence of obesity in children. There is now a considerable body of evidence from Australia and the US^{14,15} of marketers exploiting children's programming to advertise fast, convenience and snack foods and a couple of recent Australian studies highlight this problem.

In 2006, the Health Strategies Division of The Cancer Council (NSW) conducted a comprehensive analysis of the content of food advertising across Australia¹⁶. The study categorised all advertisements in four locations across the nation as being either a non-

¹¹ Hancock, T. (2000). Healthy Communities must also be Sustainability Communities. *Public Health Reports* **115**(2-3):151-6.

¹² *Designed for Disease: The Link Between Local Food Environments and Obesity and Diabetes*. California Center for Public Health Advocacy, PolicyLink, and the UCLA Center for Health Policy Research. April 2008.

¹³ Mikkelsen, L. and Chehimi, S. (2007). The Links between the Neighborhood Food Environment and Childhood Nutrition. *Prevention Institute and the Robert Wood Johnson Foundation* (www.rwjf.org/pdf/foodenvironment).

¹⁴ Powell, L. M., Szczypka, G. and Chaloupka, F. J. (2007). Adolescent exposure to food advertising on television. *American Journal of Preventive Medicine* **33**(4 Suppl):S251-6.

¹⁵ Powell, L. M., Szczypka, G. and Chaloupka, F. J. (2007). Exposure to food advertising on television among US children. *Archives of Pediatrics & Adolescent Medicine* **161**(6): 553-60.

¹⁶ Chapman, K., Nicholas, P. and Supramaniam, R. (2006). How much food advertising is there on Australian television? *Health Promotion International* **21**(3):172-180.

food ad, healthy/core food ad or unhealthy/non-core food ad according to defined criteria. The study reported that 31 percent of all advertisements in the study period were for food and, of these, 81 percent were for unhealthy/non-core foods. The study found that Saturday mornings had the highest number of unhealthy food advertisements which were for, in order of decreasing frequency, fast food, takeaway food, chocolate and confectionery. The NSW Department of Health's Public Health Training and Development Branch¹⁷ has also reported similar advertising types and frequencies.

Currently, content (including advertising) during children's programming is subject to the *Children's Television Standards 2005* (CTS). Commercial television broadcast licences are required to observe the CTS, but neither the Standards nor the *Broadcasting Services Act 1992* (Cth), provide for penalties for proven breaches of the Standards. At present, the CTS does not regulate the content of food advertising but it does prohibit the advertising of alcoholic drinks and people, organisations and companies in the manufacture, distribution, or sale of alcoholic drinks; advertisements that pressure children and/or their parents into purchasing a particular product or service and advertisements for food products that contain misleading or incorrect information about the nutritional value of those same products.

Given the number and frequency of advertisements for unhealthy food during children's television across the nation, and the demonstrated link between the retail food environment and the prevalence of obesity and diabetes, the Centre proposes:

- 3. a prohibition on advertisements for fast food, takeaway food, snacks and confectionery, and carbonated drinks and cordials during television viewing hours designated for children.**

Healthy food choices and canteens

The school canteen is an obvious place to start changing the food choices of children. While recent Australian studies have indicated that a majority of children sampled brought their recess snacks and lunches from home^{18,19}, most of the snacks were energy dense and micronutrient poor²⁰. However, when children made purchases from the canteen, it was always for less healthy foods (such as cakes and fast foods) and high sugar content soft drinks²¹.

¹⁷ Neville, L., Thomas, M. and Bauman, A. (2005). Food advertising on Australian television: the extent of children's exposure. *Health Promotion International* 20(2): 105-112.

¹⁸ Finch, M., Sutherland, R., Harrison, M. and Collins, C. (2006). Canteen purchasing practices of year 1-6 primary school children and association with SES and weight status. *Australian & New Zealand Journal of Public Health* 30(3):247-251.

¹⁹ Sanigorski, A. M. Bell, A. C., Kremer, P. J. and Swinburn B. A. (2005). Lunchbox contents of Australian school children: room for improvement. *European Journal of Clinical Nutrition* 59(11):1310-1316.

²⁰ n19.

²¹ n18 and n19.

Food choices by children can be changed, even in the short-term, to result in statistically significant reductions in key measures of body composition. This was recently borne out in an intervention study involving nearly 1000 adolescents in the Netherlands. The study demonstrated that incorporating additional lessons on physical education and advice on healthy food choices at the canteen could result in a marked and statistically significant reduction in measures such as hip circumference and skinfolds in girls and waist circumference in boys²².

Currently, there are mandatory school canteen guidelines based on the *Australian Dietary Guidelines for Children and Adolescents* and the *Australian Guide to Healthy Eating* in place for all government schools in New South Wales (*Fresh Tastes @ School*; implemented in 2005); Queensland (*Smart Choices*; implemented in 2007); Victoria (*Go For Your Life*; phased implementation from 2007-2009) and South Australia (*Right Bite*; implemented in 2008). Western Australia and Tasmania have had a voluntary canteen accreditation system that is broadly compliant with the *Australian Dietary Guidelines for Children and Adolescents* called StarCAP and CoolCAP respectively.

The initiatives of the individual States constitute a step in the right direction. However, the mandatory guidelines currently in force in New South Wales, Victoria, Queensland and South Australia have not been implemented by non-government schools. And, while there is participation from both government and non-government schools in the canteen accreditation programs in place in Western Australia and Tasmania, both programs are voluntary.

Given the recent evidence on food choices and the current state of guidelines informing school food and beverage services across Australia, the Centre proposes:

4. **that the governments of Western Australia, Tasmania, the Northern Territory and the Australian Capital Territory implement mandatory school canteen guidelines based on the *Australian Dietary Guidelines for Children and Adolescents* and the *Australian Guide to Healthy Eating* and**
5. **all Governments to require non-government schools to implement the mandatory school canteen guidelines.**

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²² Singh, A. S., Chin, A., Paw, M. J., Brug, J. and van Mechelen, W. (2007). Short-term effects of school-based weight gain prevention among adolescents. *Archives of Pediatrics & Adolescent Medicine* **161**(6):565-571.

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