

**INQUIRY INTO INQUIRY INTO CHILDHOOD
OVERWEIGHT AND OBESITY**

Organisation: Australian Health Promotion Association (NSW Branch)
Date received: 21 August 2016

The Director
Standing Committee on Social Issues
Legislative Council
Parliament House, Macquarie Street
Sydney NSW 2000

21 August 2016

Dear Director

The NSW Branch of the Australian Health Promotion Association (AHPA[®]) commends the Premier's commitment to the reduction in childhood obesity by 5% by 2025. Reducing childhood obesity will require a multi-strategy approach and bold action by the NSW government. In particular, AHPA (NSW Branch) highlights active travel, marketing of junk food, the social determinants of health, and sugar-sweetened beverages as opportunities for a significant impact on childhood obesity.

Active Travel

Recommendation 1: That NSW primary and secondary schools clearly encourage active travel to and from school

Academic improvements from active travel – “active kids do better at school”

It has been well documented that physically active children perform better at academic tasks than inactive children.¹ This has also been demonstrated in children who travel actively to school, compared to those that are driven. In addition to the many important health benefits from physical activity, walking and riding can improve children's concentration. For example, a 2012 study in Denmark found that children who cycle or walk to school demonstrate a measurable increase in concentration that lasts for up to four hours.² Supervised active travel can lead to increased independence and positive self-esteem, and contributes to safe mobility.

Active travel reduces body mass index (BMI)

Interventions to promote the uptake and maintenance of active travel through the adolescent period offer protection against the development of excess BMI.³ There is consistent evidence that active strategies can result in modest increases in PA and fitness, with active travellers accumulating

¹ Kohl HW III, Cook HD (Eds). *Educating the Student Body: Taking Physical Activity and Physical Education to School*. Washington (DC): National Academies Press (US); 2013.

² Barth S. Children who cycle to school have measurably better concentration than those who don't. 9 February, 2013. [Accessible from: <http://road.cc/content/news/75965-children-who-cycle-school-have-measurably-better-concentration-those-who-dont>.] Last accessed 27 July, 2016.

³ Pabayo, R., et al., *The importance of Active Transportation to and from school for daily physical activity among children*. *Prev Med*, 2012a. **55**(3): p. 196-200.

Pabayo, R.A., et al., *Understanding the determinants of active transportation to school among children: evidence of environmental injustice from the Quebec Longitudinal Study of Child Development*. *Health Place*, 2012b. **18**(2): p. 163-71.

Martinez-Gomez, G.I.M., A.M. Menezes, H. Gonçalves, F.C. Barros, P.C. Hallal, *Active commuting throughout adolescence and central fatness before adulthood: prospective birth cohort study*. *PLoS ONE*, 9, p. e96634, 2014.

more daily MVPA than those using motorised transport in the majority of studies. For example, a recent study (December 2015) examined travel mode to school at ages 12, 14 and 16 years, and measured height, weight and body composition at age 17 in a large cohort (more than 2000) of English schoolchildren. A consistently or predominantly active travel pattern was associated with a lower BMI at age 17 compared to those with a consistently passive pattern.

Bassett reviewed school-based policies as well as and changes to the built environment impact on energy expenditure (Bassett et al, 2013).⁴ Of the various policies and environment changes examined, the largest effects were seen in three types of interventions, of which active commuting was one and the others being mandatory physical education and classroom activity breaks.

Recommendation 2: That all NSW primary schools offer cycling education courses for all students to increase cycling proficiency

Cycling proficiency (skills) training assists children overcome skill, knowledge and confidence related barriers to cycling. For example, research suggests that children who receive cycle training are more likely to cycle, cycle on-road, and have safer cycling behaviours and are less likely to make errors and to be involved in a crash than their counterparts without cycle training.⁵ A number of European countries offer standardised and accredited cycling programs for primary school aged children that could be adapted to the Australian context. For example, Bikeability is the national programme for cycle training in England, Wales, and Scotland (<https://bikeability.org.uk/>), and it is also offered in New Zealand (<https://can.org.nz/bikeability>). No statewide cycling skills program with a practical component is currently available in NSW.

Recommendation 3: That NSW local governments prioritise the provision of walking and cycling facilities around all NSW schools to facilitate active travel

Walking or bicycling to school contributes to children's daily physical activity, but physical environment changes are often needed to improve the safety and convenience of walking and cycling routes.⁶ Where infrastructure improvements are made, the results are very positive. For example, the California Safe Routes to School legislation provided funds for building or improving footpaths, traffic lights, pedestrian crossing improvements, and bicycle paths. Evaluation results overwhelming indicated increases in walking and cycling.⁷

⁴ Bassett, D.R., et al., *Estimated energy expenditures for school-based policies and active living*. American journal of preventive medicine, 2013. **44**(2): p. 108-113.

⁵ Saville, T., Bryan-Brown, K. & Harland, G. 1996. The effectiveness of child cycle training schemes. *TRL Project Report PR 214*. Crowthorne: Transport Research Laboratory.

The Royal Society For The Prevention Of Accidents. 2001a. *The effectiveness of cyclist training* [Online]. The Royal Society for the Prevention of Accidents. Available:

http://www.rosipa.com/roadsafety/info/cyclist_training_effectiveness.pdf [Accessed May 23 2013].

The Royal Society For The Prevention Of Accidents. 2001b. *A survey of adult cyclist training in Scotland* [Online]. The Royal Society for the Prevention of Accidents. Available:

http://www.rosipa.com/roadsafety/info/cyclist_training_scotland.pdf [Accessed May 23 2013].

⁶ Fenton, M., Community design and policies for free-range children: creating environments that support routine physical activity. *Childhood Obesity*, 2012. **8**(1): p. 44-51.

⁷ Boarnet MG1, Anderson CL, Day K, McMillan T, Alfonzo M. Evaluation of the California Safe Routes to School legislation: urban form changes and children's active transportation to school. *Am J Prev Med*. 2005 Feb;**28**(2 Suppl 2):134-40.

Marketing of junk food to children

Recommendation 4: Introduce policies to reduce children's exposure to junk food marketing

While many factors influence children's eating patterns, there is consistent evidence that exposure to marketing of junk (energy-dense, nutrient poor) foods has a meaningful impact on the amount and type of junk food consumed by children.⁸ Additionally, research in NSW and Australia confirms that exposure levels are high⁹ despite promises from food companies to reduce this marketing to children.¹⁰

Action to address junk food marketing will require regulation as the evidence consistently shows this is the only effective means of reducing children's exposure. This has been explicitly recommended by the World Health Organization.¹¹ In contrast, it is clear that voluntary industry self-regulation has little effect on reducing exposure.¹² Importantly, both Australian¹³ and international¹⁴ evidence suggests that regulatory action in this space is one of the most cost-effective obesity prevention strategies, with approximately \$38 saved for every \$1 invested.

While it must be acknowledged that many of the regulatory actions aimed at reducing junk food marketing exposure are outside NSW jurisdiction, the Government is in a position to address outdoor advertising and sports sponsorship. Outdoor advertising of junk food marketing has been shown to be high around schools in NSW,¹⁵ while evidence on sports sponsorship clearly shows that

Staunton CE, Hubsmith D, Kallins W. Promoting Safe Walking and Biking to School: The Marin County Success Story. *Am J Public Health*. 2003 September; 93(9): 1431–1434.

⁸ Cairns, G., et al., *Systematic reviews of the evidence on the nature, extent and effects of food marketing to children. A retrospective summary*. *Appetite*, 2013. **62**: p. 209-15.

Boyland, E.J. and R. Whalen, *Food advertising to children and its effects on diet: review of recent prevalence and impact data*. *Pediatric Diabetes*, 2015. **16**(5): p. 331-7.

⁹ Kelly, B., et al., *Food and drink sponsorship of children's sport in Australia: who pays?* *Health Promot Int*, 2011. **26**(2): p. 188-95.

Kelly, B., et al., *Trends in food advertising to children on free-to-air television in Australia*. *Aust N Z J Public Health*, 2011. **35**(2): p. 131-4.

Freeman, B., et al., *Digital junk: Food and beverage marketing on Facebook*. *American journal of public health*, 2014. **104**(12): p. e56-e64

¹⁰ Galbraith-Emami, S. and T. Lobstein, *The impact of initiatives to limit the advertising of food and beverage products to children: a systematic review*. *Obes Rev*, 2013. **14**(12): p. 960-74.

King, L., et al., *Building the case for independent monitoring of food advertising on Australian television*. *Public Health Nutr*, 2013. **16**(12): p. 2249-54

¹¹ World Health Organization *Report of the Commission on Ending Childhood Obesity*. 2015. Available from: <http://www.who.int/end-childhood-obesity/en/> Accessed: 16 August, 2016

¹² Haddaway, N.R., Collins, A. M., Coughlin, D., Kirk, S. *The Role of Google Scholar in Evidence Reviews and Its Applicability to Grey Literature Searching*. *PLoS One*, 2015. **10**, e0138237 DOI: 10.1371/journal.pone.0138237

¹³ Cecchini, M., et al., *Tackling of unhealthy diets, physical inactivity, and obesity: health effects and cost-effectiveness*. *Lancet*, 2010. **376**(9754): p. 1775-84.

¹⁴ Carter, R., et al., *Assessing cost-effectiveness in obesity (ACE-obesity): an overview of the ACE approach, economic methods and cost results*. *BMC Public Health*, 2009. **9**: p. 419.

¹⁵ Hector D, K.L., Hardy L, St George A, Hebden L, Espinel P, Rissel C. *Evidence update on obesity prevention across the life-course. Prepared for NSW Ministry of Health. Sydney; Physical Activity Nutrition Obesity Research Group*. 2012. Available from: <http://sydney.edu.au/medicine/public-health/prevention-research/news/reports/Evidence%20update%20life%20course.pdf> Accessed: 16 August, 2016

such exposure effects children's and families' awareness and attitudes towards food products and the sponsoring brands.¹⁶

Social determinants of childhood obesity

Recommendation 5: Local governments enact policies that prioritise the provision of affordable nutritious foods in socially disadvantaged communities

It is widely acknowledged that levels of obesity are higher among children who grow up in poverty,¹⁷ who are from Indigenous background,¹⁸ and who have limited access to affordable nutritious food.¹⁹ These socio-economic and environmental factors make it difficult for socially disadvantaged families to change their lifestyle and reduce their children's risk of becoming obese. However, the adverse effects of these factors can be mitigated. Research in Australia shows that where local council policies are committed to improving accessibility and affordable healthier foods in Indigenous communities, these actions resulted in significant health improvements and long-term sustainability (4,5).²⁰

The Government is in the best position to change the underlying social determinants of obesity, and is one of the most sustainable ways to Closing the Gap.

Recommendation 6: Local governments make available safe and accessible recreational public spaces and centres for families and children in disadvantage communities

Accessible neighbourhood playgrounds and parks conducive to physical activity are strongly associated with psychological, social benefits to adults and children²¹ and healthy body mass index in children.²² Public parks and recreational centres can also provide safe spaces for active play to

¹⁶ World Health Organization *Global status report on noncommunicable diseases* 2014. Available from: <http://www.who.int/nmh/publications/ncd-status-report-2014/en/> Accessed: 16 August, 2016

World Health Organization *Report of the Commission on Ending Childhood Obesity*. 2015. Available from: <http://www.who.int/end-childhood-obesity/en/> Accessed: 16 August, 2016

¹⁷ Australian Institute of Health and Welfare 2014 Australia's health 2014. Australia's health series no. 14. Cat. no. AUS 178. Canberra: AIHW

¹⁸ ABS (Australian Bureau of Statistics) 2013. Australian Aboriginal and Torres Strait Islander Health Survey: first results, Australia, 2012–13. ABS cat. no. 4727.0.55.001. Canberra: ABS.

¹⁹ Miller LJ, Joyce S, Carter S, Yun G. Associations Between Childhood Obesity and the Availability of Food Outlets in the Local Environment: A Retrospective Cross-Sectional Study. *Am J Health Promotion* 2014; 28(6):e137-e145.

²⁰ Closing the Gap Clearinghouse (AIHW AIFS). Healthy lifestyle programs for physical activity and nutrition. Canberra and Melbourne: Australian Institute of Health and Welfare and Australian Institute of Family Studies, 2012.

Rowley KG, Daniel M, Skinner K, Skinner M, White GA, O'Dea K. Effectiveness of a community-directed 'healthy lifestyle' program in a remote Australian Aboriginal community. *Aust N Z J Public Health* 2000; 24(2): 136–44.

²¹ Bedimo-Rung AL, Mowen AJ, Cohen DA. The significance of parks to physical activity and public health: a conceptual model. *Am J Preventive Medicine*, 2005; 28(2):159–168.

Coen SE, Ross NA. Exploring the material basis for health: characteristics of parks in Montreal neighborhoods with contrasting health outcomes. *Health and Place* 2006; 12(4):361–371

²² Potwarka LR, Kaczynski AT, Flack AL. Places to play: association of park space and facilities with healthy weight status among children. *J Community Health* 2008; 33(5): 344–350.

support children's physical activity participation.²³ Both Australian²⁴ and international evidence²⁵ show that when physical improvements are made to existing recreational spaces, this led to increased park use by the community. Investment in community parks and public places can make a difference to the health and wellbeing of children and adults.

Recommendation 7: NSW Government reinforces the business of childhood obesity prevention on the agenda of all government sectors and at all levels

All government sectors are in the best position to make enduring change in the social determinants of obesity.²⁶ The South Australian Government has explicitly mandated this all-of-government approach in its Health in All Policies (HiAP) framework.²⁷ The HiAP framework provides a strategic mechanism for galvanising government relationships, make policy changes, and ultimately has the potential to progress the address the underlying causes of childhood obesity. The South Australian experience clearly shows a pragmatic but politically viable approach that can be replicated and trialled in other Australian jurisdictions. To address childhood obesity, implementing government policies in housing, transport, education, recreation, agriculture and town planning must be ongoing and coordinated.

Sugar-sweetened beverages

Recommendation 8: Investigate the policy mechanisms needed to introduce a tax on sugar sweetened beverages in NSW

An effective tax on sugar-sweetened beverages has been shown to both reduce consumption²⁸ and save money, with available estimates suggesting that savings could be up to \$55 for every \$1 invested.²⁹ Further, Veerman and colleagues have estimated that a national 20% tax on sugar-sweetened beverages would generate approximately \$400million in revenue each year.³⁰ Given

²³ Veitch J, Salmon J, Ball K. Children's perceptions of the use of public open spaces for active free-play. *Children's Geographies* 2007; 5(4):409–422.

Veitch J, Salmon J, Ball K. Children's active free play in local neighborhoods: a behavioral mapping study. *Health Education Research* 2008; 23(5): 870–879.

²⁴ Bohn-Goldbaum, E.E., Phongsavan, P., Merom, D., Rogers, K., Kamalesh, V., Bauman, A.E., 2013. Does Playground Improvement Increase Physical Activity among Children? A Quasi-Experimental Study of a Natural Experiment. *Journal of Environmental and Public Health*, Article ID 109841, 1–9. doi:10.1155/2013/109841. Cranney L, Phongsavan P, Kariukic M, Stride V, Scott A, Hua M, Bauman A. Impact of an outdoor gym on park users' physical activity: a natural experiment. *Health & Place*. 2016, 37(2016):26–34. DOI information: 10.1016/j.healthplace.2015.11.002

²⁵ Cohen, D.A., Marsh, T., Williamson, S., Golinelli, D., McKenzie, T.L., 2012. Impact and cost-effectiveness of family Fitness Zones: A natural experiment in urban public parks. *Health Place*, 18 (1), 39–45.

²⁶ CSDH (2008). Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health. Geneva, World Health Organization.

²⁷ Government of South Australia 2011. The South Australian approach to Health in All Policies: background and practical guide. Version 2, November 2011. SA Department of Health. ISBN 978-1-74243-081-2

²⁸ Colchero, M.A., et al., Beverage purchases from stores in Mexico under the excise tax on sugar sweetened beverages: observational study. *BMJ*, 2016. 352.

²⁹ Gortmaker, S.L., et al., Cost Effectiveness of Childhood Obesity Interventions: Evidence and Methods for CHOICES. *Am J Prev Med*, 2015. 49(1): p. 102–11.

³⁰ Veerman, J.L., et al., *The Impact of a Tax on Sugar-Sweetened Beverages on Health and Health Care Costs: A Modelling Study*. *PLoS One*, 2016. 11(4): p. e0151460

consumption patterns in NSW are nearly identical to national consumption patterns,³¹ it is reasonable to conclude that a NSW-specific tax would generate approximately \$128million in revenue each year for NSW alone. Further, there is strong support among grocery buyers for a tax on sugar-sweetened beverages, with over two-thirds indicating support in a recent survey.³²

The NSW Branch of AHPA would be happy to discuss these and other options to reduce childhood obesity in NSW.

Yours sincerely

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³¹ Australian Bureau of Statistics (ABS) *Australian Health Survey: Consumption of added sugars, 2011-12* Catalogue number 4364.0.55.011 2016. Available from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4364.0.55.011Main+Features12011-12?OpenDocument>

³² Bauman, A., et al. *Obesity Prevention in Children and Young People aged 0-18 Years: a Rapid Evidence Review brokered by the Sax Institute. Full Technical Report. Prepared for the NSW Ministry of Health: Sydney. Physical Activity Nutrition Obesity Research Group, [in press].* 2016.