Submission No 35

INQUIRY INTO CHILDHOOD OVERWEIGHT AND OBESITY

Organisation: Nutrition Australia

Date received: 12 September 2016



NSW Legislative Council's Standing Committee on Social Issues Parliament House 6 Macquarie Street Sydney NSW 2000

25 August 2016

Dear Honourable Committee Members

INQUIRY INTO CHILDHOOD OVERWEIGHT AND OBESITY

Nutrition Australia New South Wales (NA NSW) is grateful for the opportunity to make a submission in response to the inquiry into childhood overweight and obesity.

NA NSW is a peak not-for profit Association that promotes the health and well-being of the Australian people by encouraging them to make informed food choices. This is achieved by basing activities on scientific principles and knowledge related to human nutrition and dietetics, food science and technology.

Our objectives are to:

- act as a source of scientific information on key nutrition issues
- produce and disseminate material about nutrition to policy makers, media, educators, the food industry and consumers
- act as a consultant to consumer, schools, government, food industry groups as required on issues related to food and nutrition
- encourage innovation in the dissemination of nutritional knowledge.

The NSW Government through the Department of Health has shown leadership in the prevention of overweight and obesity as part of their *Healthy Eating and Active Living Strategy: Preventing overweight and obesity in NSW 2013-2018*. In collaboration with the Health Promotions Unit, NA NSW delivers a range of health related services to the community.

We are very supportive of this Inquiry to reduce the prevalence and extent of overweight and obese people in New South Wales and commend the Premier Hon Mike Baird for his leadership in recognising the importance of addressing childhood overweight and obesity as one of the 12 Premier's priorities.

Our recommendations are outlined under several themes in the submission. The goal is to provide strategies to reduce childhood overweight and obesity, while ensuring that the campaign focus is on health, rather than stigmatize obesity or fixate on BMI. Thus we advocate that an ethical framework should underpin approaches to obesity management to mitigate against possible negative consequences.

We appreciate the opportunity to contribute to this process and thank the committee for their time and effort. We are willing to provide any further information about this submission if required.

Yours sincerely

Barbara Ward President NANSW

Managing Director San Foundation, Adventist HealthCare (San) Prof Margaret Morris Board Member NANSW

University of NSW Head Pharmacology, School of Medical Sciences Ass. Prof Dr Ross Grant Board Member NANSW

University of Sydney Medical School, UNSW Pharmacology, School of Medical Sciences and CEO Australasian Research Institute (Sydney Adventist Hospital)



NSW Government Inquiry into childhood overweight and obesity 2016

Nutrition Australia New South Wales http://www.nutritionaustralia.org/nsw

Background statement

The mission of Nutrition Australia New South Wales is to promote optimal health for the whole community by encouraging consumption of a wide variety of whole foods in conjunction with physical activity. It offers information and advice for improving health, and major outreach activities such as cooking classes and demonstrations, and resources for workplace health. In the lead up to Nutrition week (16-22 October 2016), Nutrition Australia is promoting 'Try For 5' on a national level.

The Nutrition Australia web site (www.nutritionaustralia.org) is a major resource, offering fact sheets around nutrition in special populations (children, adolescents, adults, older adults) and advice around physical activity, ranging from advice for getting started with exercise, exercise during pregnancy, keeping motivated, exercise at work, amongst others. Nutrition Australia promotes the 'healthy eating pyramid' which is well known in the community.

Thus Nutrition Australia NSW has strong community support and credibility and is well placed to partner with the NSW government, and other agencies to energize our population to take action to reduce childhood overweight and obesity in NSW.

The problem of obesity and overweight

Dramatic increases in obesity rates over the past few decades point to the role of environmental (e.g. urbanization, reduced demand for physical activity, increased food availability) rather than genetic factors (Swinburn et al, 2009) in this rise. This problem is more than genetic. Obesity and specifically childhood obesity demands a whole of community approach.

The 2014-2015 National Health Survey reported that 27.4 % of Australian children 5 to 17 years of age are overweight or obese.

Reducing the impact of maternal obesity - benefits for the next generation

Reducing the health risks associated with early onset obesity is a major international priority. A recent prospective Australian study showed greatly increased odds of obesity in offspring of obese mothers (Alati et al, 2016), particularly in females.

Currently in Australia 50% of women enter pregnancy with a body mass index in the overweight or obese range. Extensive clinical as well as experimental evidence shows that maternal obesity induces enduring structural and functional changes in the baby. Maternal obesity adversely impacts not only maternal, fetal and neonatal health, but it is also associated with long-term adverse health effects in the next generation.

Thus in Australia, maternal overweight/obesity is common and of great concern; it increases the likelihood of poor outcomes in offspring, including increased risk of hypertension, cardiovascular disease, obesity, diabetes and metabolic dysfunction (Hochner et al, 2012, Mamun et al, 2009). Providing our young women with relevant and accessible information regarding the benefits of maintaining a healthy body weight is vital in reducing the long-term health burdens arising from maternal obesity. The nexus between maternal education and childhood obesity has been well documented, emphasizing the importance of developing information on neonatal outcomes and diet specifically directed towards young girls and mothers. See recommendations 1-4.

Reducing the impact of poor diet and obesity - benefits for mental health of young people

In addition to increasing the risk of type 2 diabetes, cardiovascular disease, being overweight or obese is associated with depression and other mental health conditions. A less recognised consequence of obesity is the possibility of deleterious effects on cognition. Detrimental effects of poor diet on the brain are observed across the lifespan.

Cross-sectional, prospective and longitudinal studies have found associations between diets rich in saturated fat and/or sugar with cognitive deficits (Edwards et al, 2012, Francis and Stevenson, 2011, Ye et al, 2011). Higher sugar intake in school-aged children was inversely related to non-verbal intelligence including spatial memory (Abargouei et al, 2012).

Improving the intake of vegetables is the key. Across the whole population vegetable intake is well below recommended levels. The existing strategies to promote vegetable intake are not working. A recent study showed that higher levels of vegetable intake in Australia were associated with significantly greater feelings of well-being (Mujcic & Oswald, 2016). The underlying cause is unknown, but it may be related to the 'investment' made in health.

The fact that optimal nutrition is good for brain health is a compelling message that needs to be promoted. The existing programs are robust and commendable (Eat for Health; Make healthy normal; NSW Healthy Eating and Active Living Strategy 2013-2018) however we need better engagement.

Obesity as an economic issue

A large national study of Australian primary and high school children, O'Dea (2008) showed that obesity is more prevalent among lower socioeconomic status groups. Both girls and boys of lower socioeconomic status had comparatively higher body mass index (BMI). Being obese was also found to be more culturally acceptable among low socioeconomic status communities.

The ability to access information regarding proper nutrition is also relevant. There is evidence that food labeling policies need to address how low levels of salience among disadvantaged families may impact (Pettigrew & Pescud, 2013). There may also be an issue for parents' ability to recognize that their children have a weight problem, thus we need a concerted, community wide approach. Obesity is more pervasive in low income and disadvantaged communities, contributing to a vicious intergenerational cycle of poor health outcomes. This issue of equity is of major concern.

Affordable healthy food

A national nutrition survey indicated that Australians consume more than the recommended amount of nutrient-poor, energy rich foods and drinks (e.g. pies, chips, cakes, biscuits, margarine, sugar and soft drinks) which contributed almost 36% of adults' and 41% of children's total energy intake (Rangan et al, 2009). There is evidence that these nutrient poor foods are often cheaper than healthy foods such as fruit and vegetables (Drewnowski, 2012) and in Australia, higher socioeconomic status neighbourhoods had increased odds of greater vegetable intake (Ball et al, 2014). Thus there is an urgent need to ensure the affordability of healthy foods particularly to low socioeconomic families. See recommendations 5-7 in this regard.

The physical environment, physical activity

Adequate access to green space and opportunity for physical activity is not only critical for physical health but has benefits for mental health. However, it is important to note that exercise cannot overcome the impacts of an unhealthy diet. Evidence suggests that a whole-of-community approach, addressing multiple risk factors is most effective at reducing obesity in lower socioeconomic areas (Boelsen-Robinson et al, 2015). Thus we also need to address the physical environment by improving urban planning to promote healthy lifestyles (recommendations 8-9).

What is needed?

Recommendations of Nutrition Australia NSW are outlined below under several themes. The goal is to provide strategies to reduce childhood overweight and obesity, while ensuring that the campaign focus is on health, rather than stigmatize obesity or fixate on BMI. Thus we advocate an ethical framework should underpin approaches to obesity management (see Azevedo & Vartanian, 2015) to mitigate against possible negative consequences.

Health Education

- Consistent and visible education and support to parents around what it means to eat healthily and the benefits of starting early in establishing good family eating habits. With particular emphasis on the recommended vegetable intake and vegetable serve sizes
- 2. We need to ensure that our educational centers that are tasked with preparing the next generation of health care professionals (Doctors, Nurses, Physios etc) and teachers include meaningful courses on health & wellness (not just disease management). In this way a consistent message will be more likely delivered across our society
- 3. Normalize discussions regarding nutrition and exercise in health care settings
- 4. Consider economic status and education levels in improving food labelling

Food availability, quality and cost

- 5. Ensure the established standard on the quality of foods offered for sale in school canteens (i.e. NSW Canteen policy) is up to date and adequately policed
- 6. Create financial incentives that encourage healthy eating (e.g. ensure that the purchase of at least selected key whole foods is widely available and cost effective).
- 7. Serious consideration should be given to approaches that reduce the accessibility of sugar sweetened beverages and snacks in schools and child care facilities (e.g. through taxation on energy dense nutrient poor beverages and snacks)

The physical environment; physical activity

- 8. Improved dissemination of information regarding the benefits of physical activity for health incentivizing physical activity.
- 9. Creation of a culture of health through improved urban planning to facilitate physical activity (ideally in a setting that also promotes healthy community interaction, engagement and support across a wide age range). Access to opportunities for activity, as well as access to public transport need to be factored into planning approvals

Co-ordination of efforts

10. Whatever strategies are finally adopted ensure that the entities with a major stake in health promotion (i.e., Nutrition Australia NSW, Cancer Council, Heart Foundation, Alzheimer's Australia, Dieticians Association Australia etc) as well as key players in the private sector, including the food industry are brought together in a way that promotes their buy-in to the key messages so that each of these entities can be effective conduits.

References

Abargouei AS, Kalantari N, Omidvar N et al. (2012) Refined carbohydrate intake in relation to non-verbal intelligence among Tehrani schoolchildren. *Public Health Nutr* 15(10):1925-31

Alati R, Betts KS, Williams GM et al. (2016) Generational increase in obesity among young women: a prospective analysis of mother-daughter dyads. *Int J Obesity* 40, 176-180

Azevedo SM, Vartanian L (2015) Ethical Issues for Public Health Approaches to Obesity. *Current Obesity Rep* 4, 324-329

Ball K, Lamb KE, Costa C et al, (2015) Neighbourhood socioeconomic disadvantage and fruit and vegetable consumption: a seven countries comparison. *Int J Nutr Phys Act* 12: 68

Boelsen-Robinson T, Peeters A, Beauchamp A, Chung A, Gearon E, Backholer K (2015) A systematic review of whole-of-community interventions by socioeconomic position. *Obesity Reviews*, 16: 806–816

Drewnowski A. (2012) The economics of food choice behavior: why obesity and poverty are linked *Nestle Nutr Inst Workshop Ser.* 73, 95-112

Edwards LM, Murray AJ, Holloway CJ et al. (2011) Short-term consumption of a high-fat diet impairs whole-body efficiency and cognitive function in sedentary men. FASEB J 25:1088-1096

Eskelinen MH, Ngandu T, Helkala EL, et al. (2008) Fat intake at midlife and cognitive impairment later in life: a population-based CAIDE study. *Int. J. Geriatr. Psychiatry*, 23:741-747

Francis HM, Stevenson RJ (2011) Higher reported saturated fat and refined sugar intake is associated with reduced hippocampal-dependent memory and sensitivity to interoceptive signals. *Behav. Neurosci*, 125:943-955

Hochner H, et al (2012) Associations of maternal prepregnancy body mass index and gestational weight gain with adult offspring cardiometabolic risk factors. *Circulation* 125, 1381-89

Mamun AA, O'Callahan M, Callaway L et al (2009) Associations of gestational weight gain with offspring body mass index and blood pressure at 21 years of age: evidence from a birth cohort study. *Circulation* 119, 1720-1727

Mujcic R, Oswald JA (2016) Evolution of Well-Being and Happiness After Increases in Consumption of Fruit and Vegetables. *Am J Public Health* 106, 1504-1510

O'Dea J (2008) Gender, ethnicity, culture and social class influences on childhood obesity among Australian schoolchildren: implications for treatment, prevention and community education. *Health & Social Care in the Community* 16(3), 282-290.

Pettigrew S, Pescud M (2013) The salience of food labeling among low-income families with overweight children. *J Nutr Educ Behav* 45, 332-339

Rangan AM, Schindeler S, Hector DJ, et al. (2009) Consumption of 'extra' foods by Australian adults: types, quantities and contribution to energy and nutrient intakes *Eur J Clin Nutr* 63:865–871

Swinburn B, Sacks G, Ravussin E (2009) Increased food energy supply is more than sufficient to explain the US epidemic of obesity $Am\ J\ Clin\ Nutr$, 90:1453-1456

Ye X, Gao X, Scott T, Tucker KL (2011) Habitual sugar intake and cognitive function among middle-aged and older Puerto Ricans without diabetes *Br J Nutr*, 106:1423-1432