

PARLIAMENT OF AUSTRALIA

SENATE SELECT COMMITTEE INTO *THE OBESITY EPIDEMIC IN AUSTRALIA*

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Endorsed by:

Women's Health Victoria (WHV) and Health at Every Size Australia (HAES)



Introduction

Dr Carolynne White (Faculty of Health, Arts & Design) and Dr Natalie Jovanovski (Faculty of Business & Law), researchers at Swinburne University of Technology, welcome the opportunity to provide a submission to the *Senate Select Committee into the Obesity Epidemic in Australia*. This submission is endorsed by Women's Health Victoria (WHV) and Health at Every Size (HAES) Australia.

Between them, Dr White and Dr Jovanovski have extensive research, clinical, and community experience working in the field of body image, eating disorders, chronic disease, mental health, and women's health issues. In May 2018, Dr White and Dr Jovanovski co-organised a symposium on women, food and bodies with Women's Health Victoria, which brought together representatives from across health promotion, primary health care and mental health sectors.

WHV is a not-for-profit organisation focusing on improving the lives of Victorian women. WHV recently published an issues paper entitled [Serving up inequality: How sex and Gender impact women's relationships with food](#). WHV also published [Growing Up Unequal: How sex and gender impact young women's health and wellbeing](#) which included a focus on young Australian women's body image and physical health.

HAES Australia is a not-for-profit professional association and peak representative body for health and fitness professionals, researchers, and policy makers who endorse Health at Every Size® principles¹ in Australia.

Background

Body weight is a biomedical risk factor that has become the focus of attention due to its association with chronic conditions, such as diabetes, cardiovascular disease, and arthritis. Therefore, this submission is guided by existing strategic frameworks:

- the *National Strategic Framework for Chronic Conditions*,² which envisions that “all Australians live healthier lives through effective prevention and management of chronic conditions” and related principles; particularly, equity, evidence-based, and person-centred approaches to health care.
- *Healthy, safe and thriving: National Strategic Framework for Child and Youth Health*,³ which recognises the connections between physical health, social and emotional wellbeing, environment and experience, and the need to address all aspects in combination to ensure that children and young people are healthy, safe and thriving.

¹ Association for Size Diversity and Health (2018). HAES® Principles. Retrieved from: <https://www.sizediversityandhealth.org/content.asp?id=152>

² Australian Government Department of Health (2017). 'National strategic framework for chronic conditions'. Retrieved from: <http://www.health.gov.au/internet/main/publishing.nsf/Content/nsfcc>

³ Australian Health Minister's Advisory Council (2015). Healthy, safe and thriving: National strategic framework for child and youth health. Retrieved from: <http://www.coaghealthcouncil.gov.au/Portals/0/Healthy%20Safe%20and%20Thriving%20-%20National%20Strategic%20Framework%20for%20Child%20and%20Youth%20Health.pdf>

This submission addresses the following terms of reference:

- A. The prevalence of overweight and obesity among children in Australia and changes in these rates over time;
- C. The short and long-term harm to health associated with obesity, particularly in children in Australia;
- D. The short and long-term economic burden of obesity, particularly related to obesity in children in Australia; and
- E. The effectiveness of existing policies and programs introduced by Australian governments to improve diets and prevent childhood obesity.

The committee's Terms of Reference are focused largely on the weight, shape and size of Australian children. However, in Australia, obesity is not classified as a health condition and many people who are in the overweight and obese categories are healthy.⁴ Therefore, this submission considers these issues from a 'weight-inclusive' perspective. A weight-inclusive approach focuses on supporting the health of people across the weight spectrum and challenges weight-stigma, especially in health care settings.⁵ As such, we make the following recommendations:

- **Recommendation 1:** Critique the premise of an "obesity epidemic" and consider the impact of this narrative on the health and well-being of children and adolescents, who are at a high risk of experiencing body dissatisfaction and body image concerns.
- **Recommendation 2:** Focus health policy on promoting the growth, development and health of all children, regardless of weight, shape, or size.
- **Recommendation 3:** Given that over one-third of Australian children are living in single parent households facing poverty, where the potential for food insecurity is high, we recommend a focus on the environmental and sociocultural factors to ensure that all children have access to (a) enough food, and (b) nutritious food that supports their growth and development.
- **Recommendation 4:** Given the increasing attention that childhood bullying has received in recent years, we strongly recommend that policies recognise human diversity and support each child's individual pattern of growth and development to improve their short and long-term health and wellbeing.
- **Recommendation 5:** Focus government policy and health care on preventing body dissatisfaction and eating disorders in children and adolescents, as well as reducing the prevalence of children experiencing food insecurity and weight-related bullying.
- **Recommendation 6:** Ensure that collection of mental health data includes collection of data on eating disorders as both primary and secondary diagnosis, as recommended in the National Agenda for Eating Disorders 2017 to 2022.⁶

⁴ Tomiyama, A. J., Hunger, J. M., Nguyen-Cuu, J., & Wells, C. (2016). Misclassification of cardiometabolic health when using body mass index categories in NHANES 2005–2012. *International Journal of Obesity*, 40(5), 883.

⁵ Tylka, T. L., Annunziato, R. A., Burgard, D., Danielsdottir, S., Shuman, E., Davis, C., & Calogero, R. M. (2014). The weight-inclusive versus weight-normative approach to health: Evaluating the evidence for prioritising well-being over weight loss. *Journal of Obesity*, xx, 18.

⁶ Butterfly Foundation for Eating Disorders (2017). The national agenda for eating disorders: Establishing a baseline of evidence-based care for any Australian with or at risk of an eating disorder. Retrieved from:

<https://www.thebutterflyfoundation.org.au/assets/Uploads/National-Agenda-for-Eating-Disorders-2018.pdf>

- **Recommendation 7:** Due to the high disease burden and economic cost of eating disorders, health and weight-related policies should not increase the risk of disordered eating or eating disorders. Campaigns and programs targeting eating, physical activity and other health-promoting behaviours should aim to do no harm.
- **Recommendation 8:** Weight is not an accurate measure of health and should not be the sole indicator used in public health screening or as a primary outcome to measure population health or the effectiveness of interventions or health system performance.
- **Recommendation 9:** Initiatives focused on the weight, shape and size of the body are counterproductive and have demonstrated limited effectiveness in reducing weight at a population level. We call for the scaling up of weight-inclusive campaigns and interventions that challenge structural factors and support all children and adolescents, and their families to adopt a healthy lifestyle.
- **Recommendation 10:** We strongly encourage the committee to measure initiatives using health-related, behaviour-based, quality of life and equity-impact indicators.

A. The prevalence of overweight and obesity among children in Australia and changes in these rates over time;

Focusing on the weight, shape and size of children is a narrow and counterproductive way of understanding their health and wellbeing; one which prioritises concerns for children's physical health over their mental health and social well-being.

While the proportion of children and adolescents aged 5–17 who were overweight or obese increased between 1995 and 2007–08 (21% and 25%, respectively), these rates have remained stable to 2011–12 (26%) and 2014–15 (27%).⁷ The definition of overweight in childhood is a Body Mass Index (BMI) between the 85th and 95th percentiles, and obesity is a BMI of greater than the 95th percentile on the US Centres for Disease Control (CDC) age-adjusted growth charts.⁸ These percentiles are arbitrary and unrelated to mortality⁹, which means that 10% of children will be classed as overweight and 5% will be classed as obese as a completely normal part of their growth pattern. Therefore, the claim that Australian children are in the midst of an "obesity epidemic" is inaccurate and obscures the many other issues around food, eating, exercise and body image that young people face. These include food insecurity/insufficiency, bullying, body image disturbance, and disordered eating.

⁷ Australian Institute of Health and Welfare (2017). Risk factors to health. Retrieved from: <https://www.aihw.gov.au/reports/biomedical-risk-factors/risk-factors-to-health/contents/overweight-and-obesity/who-is-overweight>

⁸ Australian Government Department of Health (2009). About overweight and obesity. Retrieved from: <http://www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-hlthwt-obesity.htm#bmi>

⁹ See Australian Government Department of Health (2009).

In contrast to reports that the prevalence of overweight and obesity in children has remained relatively stable in recent years, statistics show that body dissatisfaction and eating disorders are common in young people.¹⁰ The Mission Australia Youth Survey (2017), for example, shows that body image is one of the top three issues of concern for young Australians; 31.1% of respondents reported feeling either 'very' or 'extremely' concerned about their body image (girls > boys).¹¹ More than half of Australian girls report that they are most often valued for their looks, rather than their brains and ability.¹² Among Australian women, body dissatisfaction mainly manifests in concerns about weight, even in those who are underweight or a healthy weight.¹³ Body dissatisfaction often emerges during childhood and peaks in adolescence when young women are 'acutely attuned' to their body weight and shape.¹⁴

Recommendation 1: Critique the premise of an "obesity epidemic" and consider the impact of this narrative on the health and well-being of children and adolescents, who are at a high risk of experiencing body dissatisfaction and body image concerns.

C. The short and long-term harm to health associated with obesity, particularly in children in Australia;

We support an increased focus on the health and well-being of Australian children. However, emphasising obesity in public health policy and practice shifts the focus away from health-promoting behaviours and social determinants of health, which have a more significant impact on population health outcomes than body weight.¹⁵

Body weight and growth patterns in children are influenced by a complex interplay of genetic, physiological, behavioural, social, environmental, cultural and commercial determinants. Adequate nutrition and physical activity are essential foundations for typical growth and development during childhood and adolescence. Yet, statistics from Australia show that among children aged 2-18 years, over 94.6% do not eat sufficient servings of vegetables and 31.9% do not eat sufficient servings of fruit.¹⁶ In addition, 82% of children aged 5-17 years do not meet physical activity recommendations.¹⁷

¹⁰ Hay, P., Girosi, F., & Mond, J. (2015). Prevalence and sociodemographic correlates of DSM-5 eating disorders in the Australian population. *Journal of Eating Disorders*, 3(1), 19.

¹¹ Mission Australia (2017). 'Mission Australia Youth Survey 2017'. Retrieved from: <https://www.missionaustralia.com.au/what-we-do/research-evaluation/youth-survey>

¹² IPSOS Australia (2016) Everyday sexism: Girls' and young women's views on gender inequality in Australia. Retrieved from: http://www.ourwatch.org.au/getmedia/1ee3e574-ce66-4acb-b8ef-186640c9d018/Everyday-Sexism_version_03.pdf.aspx

¹³ Eating Disorders Australia (2013) Australians' body image distorted. Retrieved from: <https://eatingdisordersaustralia.org.au/australias-body-image-distortion/>

¹⁴ Webb, H. J., & Zimmer-Gembeck, M. J. (2014). The role of friends and peers in adolescent body dissatisfaction: A review and critique of 15 years of research. *Journal of Research on Adolescence*, 24(4), 564-590.

¹⁵ Medvedyuk, S., Ahmednur, A., & Raphael, D. (2017). Ideology, obesity and the social determinants of health: A critical analysis of the obesity and health relationship. *Critical Public Health*, DOI: 10.1080/09581596.2017.1356910

¹⁶ Australian Bureau of Statistics (2014/2015). 'Children's Risk Factors'. Retrieved from: <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by Subject/4364.0.55.001~2014-15~Main Features~Children's risk factors~31>

¹⁷ Australian Bureau of Statistics (2013). Australian Health Survey: Physical activity 2011-12 – Australia. Children and young people. Retrieved from: <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4364.0.55.004Chapter3002011-12>

An emphasis on using eating and physical activity to maintain an ideal body weight, shape or size is a reductionist approach and ignores the substantial benefits of behaviours such as eating well and being active for supporting children's physical, cognitive, and psychosocial growth and development. By focusing on the weight, shape and size of children's bodies through obesity prevention campaigns, our understandings of why children do not consume the recommended daily servings of fruit and vegetables, and do not regularly engage in physical activity, remain unexamined.

Recommendation 2: Focus health policy on promoting the growth, development and health of all children, regardless of weight, shape, or size.

Importantly, focusing on the weight, shape and size of children's bodies can obscure the macro-political context looking at their access to certain types of food and spaces to engage in active play. In a systematic review of public attitudes to obesity, Sikorski and colleagues found that the general public were more likely to attribute 'obesity' to the personal failings of 'obese' individuals rather than on the social and cultural environment influencing the individual (e.g., prevalence of fast-food advertising and businesses in lower socioeconomic neighbourhoods), despite recognising the links between poor health, socioeconomic status, and fast-food outlets.¹⁸ Australian research has shown that parents living below the poverty line prioritised "filling up" their children on carbohydrate-rich foods rather than focusing on nutritional value due to significant income and time-related constraints.¹⁹

Indeed, research also shows that single mothers receiving the unemployment benefit Newstart Allowance are forced to treat food as a discretionary item due to their limited income, and frequently worry about how this is impacting their children's health and wellbeing.²⁰

Recommendation 3: Given that over one-third of Australian children are living in single parent households facing poverty, where the potential for food insecurity is high²¹, we recommend a focus on the environmental and sociocultural factors to ensure that all children have access to (a) enough food, and (b) nutritious food that supports their growth and development.

¹⁸ Sikorski, C., Luppia, M., Kaiser, M., Glaesmer, H., Schomerus, G., Konig, H-H., Riedel-Heller, S. G. (2011). The stigma of obesity in the general public and its implication for public health – A systematic review. *BMC Public Health*, 11, 661-669.

¹⁹ Burns, C., Cook, K., & Mavoia, H. (2013). Role of expendable income and price in food choice by low income families. *Appetite*, 71, 209-217.

²⁰ McKenzie, H., & McKay, F. (2017). Food as a discretionary item: The impact of welfare payment changes on low-income single mother's food choices and strategies. *Journal of Poverty and Social Justice*, 25(1), 35-48.

²¹ McKenzie, H., & McKay, F. (2017). Food as a discretionary item: The impact of welfare payment changes on low-income single mother's food choices and strategies. *Journal of Poverty and Social Justice*, 25(1), 35-48.

Another short-, and potentially long-term, harm of focusing on the weight, shape and size of children's (and adult) bodies is the potential for bullying and stigmatising attitudes to ensue. Weight stigma refers to negative judgements made about a person on the basis of their body shape or size and affects people across the weight spectrum. Pathologising certain body shapes and sizes while idealising others contributes to weight stigma. In the United States, the prevalence of weight stigma increased by 66% between 1996 and 2006.²² Studies show that weight stigma is also common in Australia with 86% of people in the obese BMI category²³ and 79% of people in the general population reporting direct or indirect weight stigma.²⁴

There is a common belief that weight stigma is necessary to motivate people to lose weight. In fact, research shows that the opposite is true. A recent systematic review found that weight stigma was associated with serious adverse physiological and psychological consequences.²⁵ Stigmatising attitudes directed at children who are considered 'overweight' or 'obese' may also lead to counterproductive compensatory behaviours that mirror eating disordered behaviours. Longitudinal research shows that being teased about weight by family members or peers during adolescence predicts adverse outcomes including binge eating, unhealthy weight control practices, poor body image, higher BMI and obesity 15 years later, especially among women.²⁶

Recommendation 4: Given the increasing attention that childhood bullying has received in recent years, we strongly recommend that policies recognise human diversity and support each child's individual pattern of growth and development to improve their short and long-term health and wellbeing.

In addition to reinforcing stigmatising attitudes towards people with larger bodies, an emphasis on body weight, shape or size may unintentionally produce counterproductive body-policing narratives. Research shows that women who are subject to objectifying social messages that focus on their weight and beauty learn to develop a judgemental attitude about their own weight and shape.

²² Andreyeva, T., Puhl, R. M., & Brownell, K. E. (2008). Changes in perceived weight discrimination among Americans, 1995-1996 through 2004-2006. *Obesity*, 16(5), xx-xx.

²³ Lewis, S., Thomas, S. L., Blood, R. W., Castle, D. J., Hyde, J., & Komesaroff, P. A. (2011). How do obese individuals perceive and respond to the different types of obesity stigma that they encounter in their daily lives? A qualitative study. *Social Science & Medicine*, 73(9), 1349-1356.

²⁴ Foy, M. (2017). *Living with weight stigma: An occupational perspective* (Unpublished honours thesis). Monash University, Frankston, Victoria, Australia.

²⁵ Wu, Y-K., & Berry, D. C. (2018). Impact of weight stigma on physiological and psychological health outcomes for overweight and obese adults: A systematic review. *Journal of Advanced Nursing*, 74(5), DOI: <https://doi.org/10.1111/jan.13511>

²⁶ Puhl, R. M., Wall, M. M., Chen, C., Austin, S. B., Eisenberg, M. E., & Neumark-Sztainer, D. (2017). Experiences of weight teasing in adolescence and weight-related outcomes in adulthood: A 15-year longitudinal study. *Preventive Medicine*, 100, 173-179.

Dissatisfaction with the appearance of the body can, in turn, lead to an uncomfortable relationship with food and one's body, as the focus of behaviour is always on preventing weight gain.²⁷ Regardless of BMI, adolescents who perceive themselves to be underweight or overweight had poorer physical activity and eating patterns, compared to adolescents who perceived their weight to be "about right".²⁸ Body dissatisfaction and changing eating or exercise patterns to change one's body shape or size, are established risk factors for eating disorders.²⁹

Eating disorders are severe mental illnesses that have a high mortality rate³⁰ and are a leading contributor to the non-fatal burden of disease among Australian women aged between 15-44 years.³¹ Eating disorders affect approximately 4% of Australians³² and occur in people across the weight spectrum.³³ Anorexia nervosa is the most recognised diagnosis, affecting 3% of people with eating disorders. However, the most common forms of eating disorder in Australia are bulimia nervosa (BN) (12%) and binge eating disorder (BED) (47%).³⁴ It is important to note that these statistics pre-date the implementation of DSM-5, and that 30-50% of people with BN and BED were undiagnosed. Using DSM-5, the 3-month point prevalence of any form of DSM-5 eating disorder or disordered eating is estimated to be approximately 16.3%.³⁵ However, the lack of routine collection of information about eating disorders means that the real prevalence and impact of eating disorders may be underestimated.

Recommendation 5: Focus government policy and health care on preventing body dissatisfaction and eating disorders in children and adolescents, as well as reducing the prevalence of children experiencing food insecurity and weight-related bullying.

Recommendation 6: Ensure that collection of mental health data includes collection of data on eating disorders as both primary and secondary diagnosis, as recommended in the National Agenda for Eating Disorders 2017 to 2022.³⁶

²⁷ Jovanovski, N. (2017). *Digesting femininities: The feminist politics of contemporary food culture*. New York: Palgrave Macmillan.

²⁸ Patte, K. A., Laxer, R., Wei, Q., & Leatherdale, S. T. (2016). Weight perception and weight-control intention among youth in the COMPASS study. *American Journal of Health Behavior*, 40(5), 614-623.

²⁹ National Eating Disorders Collaboration (n.d.). Risk and protective factors. Retrieved from:

<https://www.nedc.com.au/eating-disorders/eating-disorders-explained/risk-and-protective-factors/>

³⁰ Arcelus J, Mitchell AJ, Wales J, Nielsen S. (2011). Mortality rates in patients with anorexia nervosa and other eating disorders: a meta-analysis of 36 studies. *Archives of General Psychiatry*, 68(7):724-731.

³¹ Australian Institute of Health and Welfare. *Australian Burden of Disease Study: Impact and causes of illness and death in Australia 2011*. Canberra: AIHW; 2016.

³² Butterfly Foundation for Eating Disorders (2012). Paying the price: The economic and social impact of eating disorders in Australia. A report from Deloitte Access Economics. Retrieved from:

<https://thebutterflyfoundation.org.au/assets/Uploads/Butterfly-report-Paying-the-Price-Executive-Summary.pdf>

³³ Hay, P., Girosi, F., & Mond, J. (2015). Prevalence and sociodemographic correlates of DSM-5 eating disorders in the Australian population. *Journal of Eating Disorders*, 3(1), 19.

³⁴ See Butterfly Foundation for Eating Disorders (2012).

³⁵ See Hay et al., (2015).

³⁶ Butterfly Foundation for Eating Disorders (2017). The national agenda for eating disorders: Establishing a baseline of evidence-based care for any Australian with or at risk of an eating disorder. Retrieved from:

<https://www.thebutterflyfoundation.org.au/assets/Uploads/National-Agenda-for-Eating-Disorders-2018.pdf>

D. The short and long-term economic burden of obesity, particularly related to obesity in children in Australia;

While there is often an emphasis on the economic burden of obesity in Australia, we argue that it is important to focus on the economic burden of counterproductive weight-loss messages and eating disorders in Australia. In 2008, an Access Economics report, commissioned by Diabetes Australia, estimated that obesity affected 3.71 million Australians, with an associated burden of disease of \$49.9 billion and socioeconomic impact of \$58.2 billion.³⁷ In 2012, Deloitte Access Economics compiled a report using similar methods for the Butterfly Foundation. This report estimated that eating disorders affected 913, 986 Australians in 2012, with an associated burden of disease of \$52.5 billion and total socioeconomic impact of \$69.7 billion.³⁸

Recommendation 7: Due to the high disease burden and economic cost of eating disorders, health and weight-related policies should not increase the risk of disordered eating or eating disorders.³⁹ Campaigns and programs targeting eating, physical activity and other health-promoting behaviours should aim to do no harm.⁴⁰

Currently the BMI is used as a screening tool to identify children and adults who are overweight and obese and clinical guidelines recommend the provision of lifestyle advice as standard care and weight management interventions to all children with a BMI over the 85th percentile and adults with a BMI over 30.⁴¹ However, BMI is not a reliable measure of health; the health of 1 in 3 adults is misclassified using BMI⁴² and healthy lifestyle habits are associated with reduced mortality risk, regardless of baseline BMI.⁴³ Indeed, children of all sizes can be sedentary and have poor diets, just as active, well-nourished children come in all shapes too.

Such misclassification of health status has implications for the safety, quality, efficiency, and cost-effectiveness of health care, with people either (a) missing out on essential health care or (b) receiving health care they do not need. As such, the economic burden of obesity is inflated by over-diagnosis, leading to weight loss interventions that are ineffective for adults in the long-term.⁴⁴

³⁷ Diabetes Australia (2008). The growing cost of obesity in 2008: Three years on. A report by Access Economics. Retrieved from: <http://static.diabetesaustralia.com.au/s/fileassets/diabetes-australia/7b855650-e129-4499-a371-c7932f8cc38d.pdf>

³⁸ Butterfly Foundation for Eating Disorders (2012). Paying the price: The economic and social impact of eating disorders in Australia. A report from Deloitte Access Economics. Retrieved from: <https://thebutterflyfoundation.org.au/assets/Uploads/Butterfly-report-Paying-the-Price-Executive-Summary.pdf>

³⁹ O'Hara L, Gregg J (2006). The war on obesity: a social determinant of health. *Health Promotion Journal of Australia*, 17 (3):260-3.

⁴⁰ National Eating Disorders Collaboration (2011). Evaluating the risk of harm of weight-related public messages. Retrieved from: <https://nedc.com.au/assets/NEDC-Publications/Evaluating-the-Risk-of-Harm-final.pdf>

⁴¹ National Health and Medical Research Council (Australia). (2013). Clinical practice guidelines for the management of overweight and obesity in adults, adolescents and children in Australia. NHMRC.

⁴² Tomiyama, A. J., Hunger, J. M., Nguyen-Cuu, J., & Wells, C. (2016). Misclassification of cardiometabolic health when using body mass index categories in NHANES 2005–2012. *International Journal of Obesity*, 40(5), 883.

⁴³ Matheson, E. M., King, D. E., & Everett, C. J. (2012). Healthy lifestyle habits and mortality in overweight and obese individuals. *The Journal of the American Board of Family Medicine*, 25(1), 9-15.

⁴⁴ See NHMRC (2013) pg. 160.

Recommendation 8: Weight is not an accurate measure of health and should not be the sole indicator used in public health screening or as a primary outcome to measure population health, or the effectiveness of interventions or health system performance.

E. The effectiveness of existing policies and programs introduced by Australian governments to improve diets and prevent childhood obesity;

To date, most policies and programs that are currently being used in Australia, as well as approaches that have been used in the past, adopt a weight-normative approach that prioritises body weight as a main determinant of health.⁴⁵ Such approaches are counterproductive and detract from supporting people to develop a positive relationship with food, eating, physical activity, and their bodies.

Using the BMI, for example, to assess the effectiveness of public health policies and programs is misguided as positive changes to dietary patterns and physical activity are not automatically expressed as weight changes. For example, the \$32 million Obesity Prevention and Lifestyle (OPAL) program in South Australia⁴⁶ aimed to increase the percentage of children aged 0-18 who were of normal body weight. Using body weight as its primary outcome measure, the multi-component program did not significantly reduce the proportion of students who were in the "obese" category.

Using BMI as the primary outcome measure devalues other behavioural or environmental indicators that have a clearer relationship to health and disease outcomes and may be more amenable to change. For instance, OPAL demonstrated other benefits such as significant reductions in discretionary food intake, increased participation in physical activity, and improved social capital through community capacity building.

Framing programs as obesity prevention may detract from the ultimate aim of improving population health and wellbeing. Media campaigns, especially those directed at adults (e.g., Live Lighter) disempower people by focusing too heavily on the weight and shape of the body at the expense of health behaviours that are within their control, and upstream action on social, cultural, environmental, and commercial determinants of health. Furthermore, focusing efforts on obesity prevention pathologises larger bodies, creating an environment that entrenches weight stigma. Disordered eating behaviours, such as yo-yo dieting, and compensatory behaviours, such as self-starvation, bingeing, and purging, that develop in response to weight stigma often begin in adolescence and predict poorer health in adulthood.

⁴⁵ Tylka, T. L., Annunziato, R. A., Burgard, D., Danielsdottir, S., Shuman, E., Davis, C., & Calogero, R. M. (2014). The weight-inclusive versus weight-normative approach to health: Evaluating the evidence for prioritising well-being over weight loss. *Journal of Obesity*, *xx*, 18.

⁴⁶ Bell, L., Ullah, S., Leslie, E., Mararey, A., Olds, T et al. (2016). OPAL Evaluation Project final report. Retrieved from: <http://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/healthy+living/healthy+communities/local+community/opal/flinders+university+opal+evaluation+project+report>

One notable and current campaign that focuses on promoting positive sport and exercise-related health practices in women is VicHealth's 'This Girl Can' campaign.⁴⁷ Rather than focusing on the weight, shape and size of women's bodies in this campaign, VicHealth have foregrounded the importance of understanding women's stories and, specifically, the factors that have prevented them from participating in sports and exercising. In doing so, the campaign effectively challenges the structural factors (e.g., sexism in sporting clubs) that often precipitate women's negative experiences or potentially prevent women from engaging in sports and exercise. We suggest that future health campaigns addressing children's health focus on promoting empowering messages about nutrition and physical exercise, rather than potentially stigmatising messages about their weight, shape and size.

In addition, a growing body of research demonstrates that interventions that adopt a weight-inclusive – rather than weight-normative – approach to health care have been shown to benefit people's mental health and social well-being, as well as their physical health.⁴⁸ Interventions that teach people to eat by internal cues, rather than externally prescribed diet programs, contributed to significant and sustained improvements on a range of outcomes including physiological markers of cardiovascular risk, physical activity, eating behaviours, body satisfaction, mental health, and quality of life.⁴⁹

Recommendation 9: Initiatives focused on the weight, shape and size of the body are counterproductive and have demonstrated limited effectiveness in reducing weight at a population level. We call for the scaling up of weight-inclusive campaigns and interventions that challenge structural factors and support all children and adolescents, and their families to adopt a healthy lifestyle.

Supporting the capacity of children and families to adopt a healthy lifestyle through a focus on promoting physical activity and healthy eating, without a focus on weight, shape and size, is thus an important first step in designing effective public health policies. It follows then that it is these factors that should be used as key outcome measures of change, not BMI. It is, thus, time to lead by innovation as a focus on weight loss as a proxy for health has regrettably resulted in little sustained benefit and inequitable opportunities to improve the health of populations most at risk for lifestyle-related chronic disease.

Recommendation 10: We strongly encourage the committee to measure initiatives using health-related, behaviour-based, quality of life, and equity-impact indicators.

⁴⁷ VicHealth (2018). 'This Girl Can'. Retrieved from: <https://thisgirlcan.com.au/>

⁴⁸ Clifford, D., Ozier, A., Bundros, J., Moore, J., Kreiser, A., & Morris, M. N. (2015). Impact of non-diet approaches on attitudes, behaviors, and health outcomes: A systematic review. *Journal of Nutrition Education and Behavior*, 47(2), 143-155.

⁴⁹ Schaefer, J. T., & Magnuson, A. B. (2014). A review of interventions that promote eating by internal cues. *Journal of the Academy of Nutrition and Dietetics*, 114(5), 734-760.

Conclusion

Dr White, Dr Jovanovski, Women's Health Victoria (WHV) and HAES Australia thank the Senate Select Committee for the opportunity to make this submission to their inquiry into Childhood Obesity in Australia. We welcome the investigation of these issues as a positive step towards improving the health and well-being of all Australian children and adolescents, while preventing chronic physical and mental health conditions. We would be more than happy to provide further clarification on any of the matters raised in this submission should this be required.

END OF SUBMISSION