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House of Representatives Standing Committee on Health and Ageing  
 Parliament House  
 Canberra ACT 2600

Dear Secretary

### Submission to Inquiry into Obesity in Australia

The adverse physical and psychological consequences of overweight and obesity in the Australian population, while a focus of increased attention in recent times, have been recognized as a significant public health issue requiring preventive action for at least four decades (Ball & Crawford, 2004). It is encouraging that the Federal Government has recognized the magnitude and seriousness of the obesity epidemic within Australia, and is now working proactively to begin addressing this problem.

Our research (selected references attached) has demonstrated that obesity confers a substantial burden on the Australian healthcare system. Based on national data we have shown that overweight and obese individuals are more likely than those of a healthy weight to use health services (Reidpath et al, 2002). In addition, there is a substantial financial burden to individuals themselves (Ball, Crawford, & Andajani-Sutjahjo, 2003). Our research has also shown that health care professionals - dietitians and general practitioners - do not have the necessary skills to deal with obesity once it is established (Campbell & Crawford, 2000; Campbell et al, 2000). There is an urgent need for preventive action.

We would like to highlight a number of key issues concerning the changing prevalence of obesity within the Australian population, and efforts to manage the epidemic and prevent further increases in obesity.

#### ***The changing prevalence of obesity in the population: who is most at risk?***

We have published the first prospective data in the Australian population documenting how **rates of overweight and obesity are changing** in children and adults (Ball, Brown, & Crawford, 2002; Ball, Crawford, Ireland, & Hodge, 2003; Hesketh et al, 2004). Our work shows that:

- While rates of obesity are increasing across the entire population, certain population groups are at particularly high risk of unhealthy weight gain. These include **children, young adult women, and persons of low socioeconomic position** (eg those with low education, low incomes, or low status occupations). For example, our research has shown that over 40% of young (18-23 year old) women gained substantial amounts of weight over just a four-year study period (Ball, Brown & Crawford, 2002).
- **Childhood and early adulthood** represent key windows during which to intervene to address the risk of obesity associated with these life stages. Such intervention must be **ongoing**, rather than limited to a single life stage/point in time.

We acknowledge, whilst this has not been a key focus of our groups' work, that **Indigenous Australians** are a specific at risk group that warrant particular focus in obesity prevention efforts.

## **Recommendations for obesity prevention**

While action is required urgently to address the high levels of obesity in the population now, we also need to continue to **build a strong evidence base** to underpin obesity prevention programs and to evaluate our efforts to tackle overweight and obesity.

- We have previously highlighted that, contrary to recommendations dating back to the 1970s, little obesity prevention research has been conducted internationally (Ball & Crawford, 2004). Work by a member of our research group has shown, for example, that the existing evidence about the effectiveness of interventions to prevent obesity in children is currently lacking.
- Recent **intervention work we have undertaken**, to prevent unhealthy weight gain amongst children in schools (Salmon et al., 2008), and to promote physical activity levels amongst adults (Ball et al., 2005), has shown promise, but there remains little evidence internationally as to the most effective strategies to counter obesity. We must ensure we continue to resource efforts to build this evidence base to inform policy and practice.
- We are currently contributing to addressing this need by undertaking a five-year program of research that seeks to understand and counter the high prevalence of obesity in high risk groups – namely women and children experiencing socioeconomic disadvantage. This work is premised on the notion of **resilience** – that is, identifying characteristics of those women and children who manage, despite their increased risk due to socioeconomic disadvantage, to successfully maintain a healthy weight, and applying the learnings from these successful individuals to help others manage their weight and avoid becoming overweight.
- In order to develop effective strategies to prevent obesity, it is important we **better understand people's eating and physical activity behaviours**, the determinants of these behaviours, and how they might be influenced. Recent rhetoric about the causes of the obesity epidemic has focused on 'obesogenic environments'. While acknowledging the importance of environmental factors, however, it should be noted that these must operate through people's **eating and physical activity behaviours**. We have shown, for example, that amongst the strongest predictors of whether women will walk for exercise, and whether they will consume fruits and vegetables, involve not neighbourhood environment factors, but personal beliefs and motivations (Ball, Crawford, & Mishra, 2006; Ball et al., 2007).
- Based on our own research, areas that we feel warrant further attention include fostering **supportive family environments**, skilling and supporting **first-time parents**, and focusing on **interactions between individuals and the places they live and work**. It will be important for any environmental interventions to be integrated with educational and behaviour change programs to enable people to take advantage of supportive physical activity and eating environments.
- Any programs that are developed should be based on the **best evidence** available and should be **appropriately evaluated** to establish that these are the most effective approaches and continue building the evidence base.

In summary, we welcome the opportunity to provide input into this inquiry, and emphasise the need for ongoing research to underpin decision making about how best to deal with increasing rates of obesity in Australia, particularly amongst children, women, and persons experiencing socioeconomic disadvantage.

Yours sincerely



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## References cited

We would be happy to provide copies of these references upon request.

Ball, K., Brown, W., Crawford, D. (2002). Who does not gain weight? Prevalence and predictors of weight maintenance in young women. *International Journal of Obesity*, 26, 1570-1578.

Ball, K. & Crawford, D. (2004). Healthy weight 2008 – Still waiting on Australia to act? (Invited editorial). *Nutrition and Dietetics*, 61(1), 6.

Ball, K., Crawford, D., & Andajani-Sutjahjo, S. (2003). The costs of weight control: what do young women pay? *Medical Journal of Australia*, 179(11/12), 586.

Ball, K., Crawford, D., Ireland, P., & Hodge, A. (2003). Patterns and demographic predictors of five-year weight change in a multi-ethnic cohort of men and women in Australia. *Public Health Nutrition*, 6(3), 269-280.

Ball, K., Crawford, D., & Mishra, G. (2006). Socioeconomic inequalities in women's fruit and vegetable intakes: A multilevel study. *Public Health Nutrition*, 9(5), 623-630

Ball, K., Salmon, J., Leslie, E., Owen, N., & King, A. (2005). Piloting the feasibility and effectiveness of print- and telephone-mediated interventions for promoting the adoption of physical activity in Australian adults. *Journal of Science & Medicine in Sport*, 8(2), 134-142.

Ball, K., Timperio, A., Salmon, J., Giles-Corti, B., Roberts, R., & Crawford, D. (2007). Personal, social and environmental determinants of educational inequalities in walking: A multilevel study. *Journal of Epidemiology and Community Health*, 61, 108-114.

Campbell K, & Crawford D. (2000). Management of obesity: Attitudes and practices of Australian dietitians. *International Journal of Obesity*, 24, 701-710.

Campbell K, Engel H, Timperio A, Cooper C, & Crawford D. (2000). Australian General Practitioners' attitudes and practices regarding the management of obesity. *Obesity Research*, 8, 459-466.

Hesketh K, Wake M, Waters E, Carlin J, & Crawford D. (2004). Stability of body mass index in Australian children: a prospective cohort study across the middle childhood years. *Public Health Nutrition*, 7, 303-309.

Reidpath D, Crawford D, Tilgner L, & Gibbons C. (2002). Relationship between Body Mass Index and the use of healthcare services in Australia *Obesity Research*, 10, 526-531.

Salmon, J., Ball, K., Hume, C., Booth, M., & Crawford, D. (2008). Outcomes of a group randomized trial to prevent excess weight gain, reduce screen behaviours and promote physical activity in 10-year-old children: Switch-Play. *International Journal of Obesity*, 32(4), 601-612.

