



Inquiry into Obesity in Australia

5 June, 2008

Committee Secretary
Standing Committee on Health and Ageing
House of Representatives
PO Box 6021
Parliament House
CANBERRA ACT 2600
AUSTRALIA

Dear Secretary,

I write to make a submission to the Inquiry into Obesity in Australia with particular reference to prevention of childhood obesity and health promotion activities in schools and communities.

My research since 1989 has focused on the prevalence of obesity and overweight among children and adolescents, with a particular focus on the impact of social class and ethnicity/cultural background.

In this submission, I would like to highlight the main points as follows:-

Definitions of childhood obesity using Body Mass Index have several limitations

1. Using BMI to estimate the population prevalence of overweight and obesity among growing children is limited by the fact that BMI is only a rough, one-off screening measure of weight for height and not a measure of fatness *per se* ⁽¹⁾; Body composition and central adiposity in children vary greatly at any given BMI ⁽²⁾; BMI ranges for children vary according to the child's stage of pubertal development ⁽³⁾ and BMI varies by ethnicity, height and muscularity ⁽⁴⁾. Hence, figures that report the prevalence of obesity and overweight need to be considered in light of the many limitations in measurement.
2. "Overweight"& "Obesity" categories are different and combining both into one category is misleading Combining the proportion of "big" children (i.e. "overweight) with the number obese and referring to this as "children who are overweight or obese" results in a large number – about 20% in 1995 ⁽⁵⁾; 24% in 2000 and 24.5% in 2006 ^(6,7). The common statement that a "quarter of our children are too fat" is therefore inaccurate and exaggerated, as many of these children may simply be bigger, taller or more muscular than their peers. Children categorized in the "Overweight" category may be "over fat", but carrying extra fat is not necessarily a health risk in growing, active children. Long

term studies from the USA recently report that being underweight or obese carries an increased risk of death, but the overweight category does not. ⁽⁸⁾ The number of Australian children and adolescents who are likely to be “too fat” is actually around 6.4% ⁽⁷⁾ which is the current number who are obese. Whilst obesity may pose health consequences in some children ⁽⁹⁾ not all of the so-called “obese” or “overweight” children have any current or future health risk ⁽¹⁾ and to assume so is a very simplistic, somewhat prejudiced view. Those who are obese, may be at risk, especially those who have a family history of type 2 diabetes.

3. Overweight is not a clinically accurate measure in growing children. The “overweight” category is not a definitive or accurate category in growing children and teens. This category may simply be measuring “bigness” and the children who are categorized as “overweight” may simply be bigger than their peers, especially Pacific Islanders who are known to be taller and more muscular than people of European descent ⁽¹⁰⁾.

Use of the term “childhood obesity epidemic” is exaggerated

4. Use of the term “childhood obesity epidemic” is exaggerated. The number of children and adolescents aged 4-16 years who were obese in 1985 was about 1.5 % and this increased to about 5.0% in 1995 ⁽⁵⁾. This is commonly quoted as a “more than tripling” of childhood obesity, which is statistically correct, but a little emotive and exaggerated, I think, as 5% is still a fairly small number. The number of obese under 16 year olds, matched to the 1995 ⁽⁵⁾ sample from my recent 2006 study is approximately 5.8 % which is not a significant increase in childhood obesity from the 5.0% cited in 1995. It is true to say that Australian children have been getting bigger over several decades, but the term “childhood obesity epidemic” is exaggerated, unhelpful and unnecessarily dramatic.
5. Australian children are getting bigger, but that this “bigness” alone does not necessarily confer any current or future health status or health risk ⁽¹⁾. Big children, teens and adults who have some daily physical activity and who do not smoke can certainly be fit and healthy ⁽¹¹⁾.
6. Weight alone does not predict child health. A child’s health is composed of physical, mental, emotional, psychological, social, cultural and spiritual dimensions and not merely the absence of disease ⁽¹²⁾. Child health is certainly not conferred by being in a so-called “healthy” weight range, nor is it achieved via the absence of obesity. Underweight is as undesirable as obesity ⁽⁸⁾ and this message is an important one to convey in order to consider the risk of giving potentially dangerous weight messages to susceptible children and adolescents. ⁽¹³⁾ Any program focused on preventing childhood obesity, must consider the first principle of medicine “First, do no harm” ⁽¹³⁾. Hence, my suggestion that the focus of prevention should be on sensible messages such as “healthy growth and development of children and teens “rather than a negative focus on “weight, weight loss, fatness, obesity ” etc.

Increases in overweight & obesity in children have been modest

7. Evidence shows that among children and adolescents aged less than 16 years, obesity has risen from approximately 1.5 % in the 1980s to 5.0% in the 1990s to 5.8% in 2006. My research findings from cross sectional data collected in 2000 and then again in 2006 shows that childhood obesity has not risen significantly since 1995 and similar results are recently reported from the USA ⁽¹⁴⁾. The US report found that, like the patterns in the

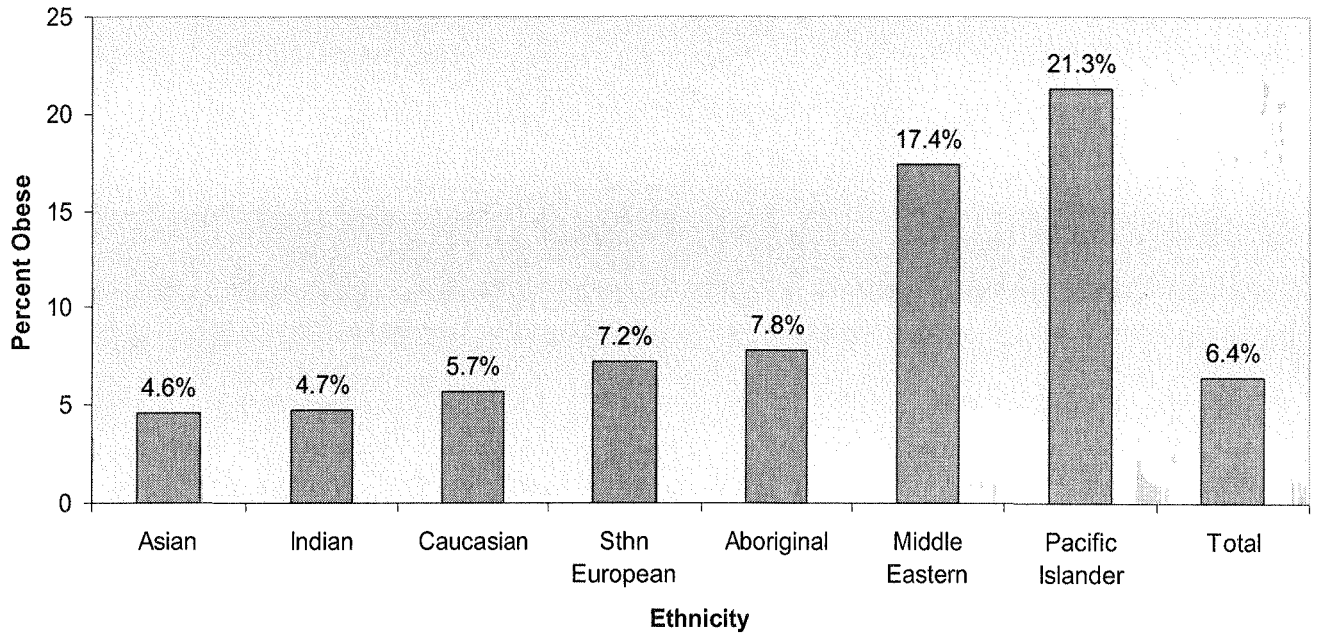
Australian data, the major increase in childhood obesity was observed in the 1980s and 1990s and that obesity has not increased since 1999. To continue referring to this so-called “epidemic” of childhood obesity is inaccurate and fails to address the most current evidence in the research literature.

8. Evidence shows that “overweight” has increased since the 1980s from approximately 10% to 15% in 1995 and 18% ⁽⁴⁾ in my data from 2006 ⁽⁷⁾. However, the limitations of using this BMI category to confidently define “fatness” need to be considered, as well as the fact that no clear assumptions can be made about the association between the overweight category and ill health in children ⁽¹⁾ or adults ⁽⁸⁾.

Childhood obesity is more prevalent in certain ethnic and cultural groups.

9. Childhood obesity is more prevalent in certain ethnic and cultural groups. The graph below, illustrates the high risk of obesity and hence, the high risk of type 2 diabetes, among Middle Eastern, Aboriginal and Pacific Islander children ⁽⁷⁾.

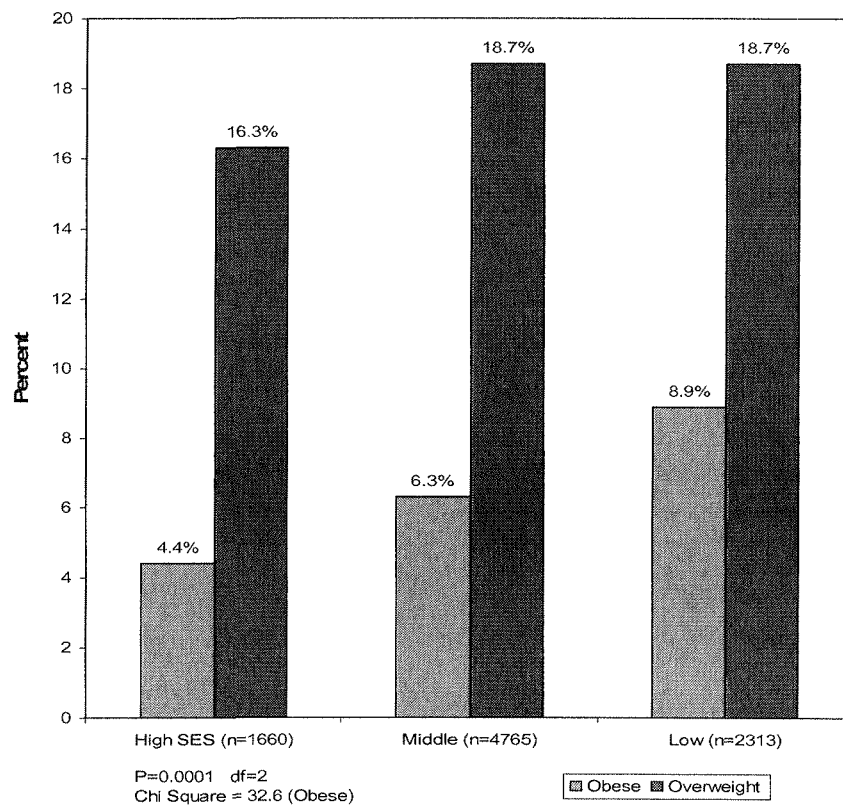
Prevalence of obesity and ethnic group among Australian schoolchildren in 2006 (N=8356)



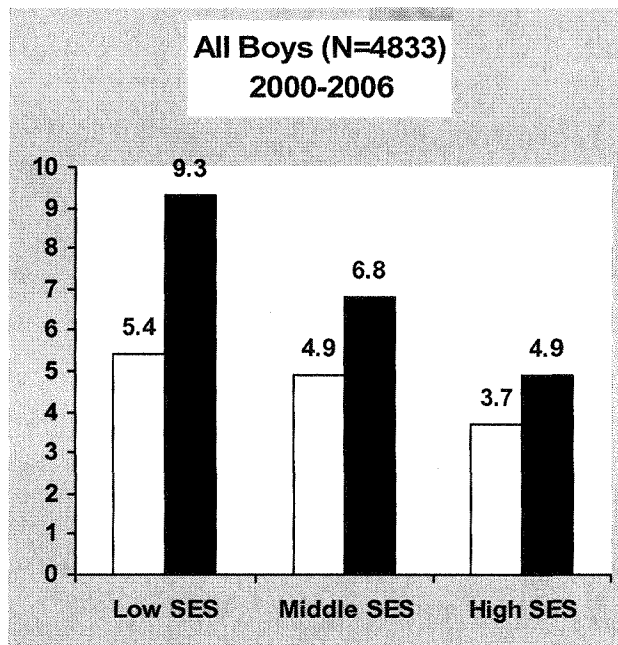
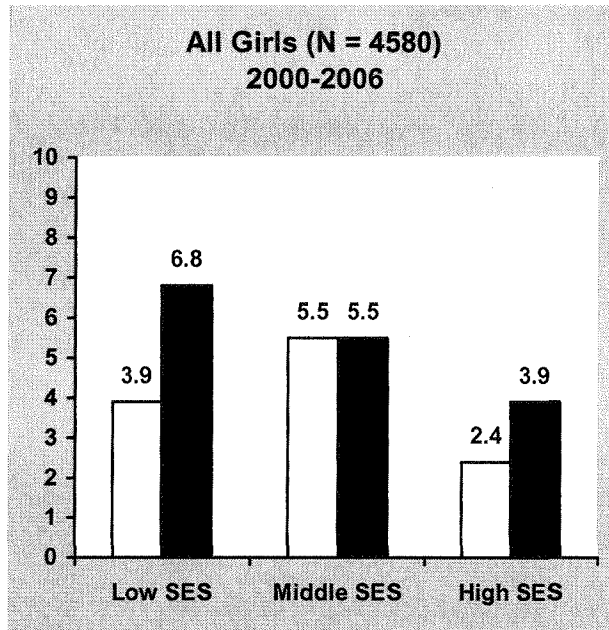
Obesity is most prevalent in children from low SES communities.

10. Obesity is most prevalent in children from low SES communities. The risk of obesity by socioeconomic status (SES) is shown below. Low and to a lesser extent, Middle SES children and adolescents are at a greater risk of obesity than higher SES children ^(6,7).
11. The relative risk of obesity in low SES children is 2.4 times and 2.0 times in middle SES compared to that of high SES.

Figure 2 Prevalence of obesity and overweight by socioeconomic status among Australian school children in 2006



12. Childhood obesity from 2000 to 2006 has increased significantly in low income children. An increase of obesity prevalence between 2000 to 2006 appears to have been most pronounced in the low income girls and boys, as outlined in the graphs below.



13. Some Australian children are more at risk of obesity than others. In summary, childhood obesity prevalence in Australia is measured by BMI which provides data based on height and weight only and has several limitations.
14. The risk of obesity and therefore, the risk of Type 2 diabetes, is highest among low SES children and adolescents, who are inactive, particularly those low income, disadvantaged children from Pacific Islander, Middle Eastern and Aboriginal communities. These

children have the greatest risk of ill health from obesity and they have the most to gain from sensible, valid interventions such as the provision of fruits and vegetables; school and community breakfast programs; safe play areas in school grounds and in local communities; provision of community playing equipment and sporting facilities and culturally appropriate activities such as community dancing and private community swimming areas.

The “First, do no harm” message is extremely important

15. The “First, do no harm” message is extremely important in any discussion of obesity or any obesity prevention activity, particularly among children and teens, because there is evidence to show that focusing on a “weight” message is likely to create weight concerns, poor self esteem, body image problems, dieting and disordered eating ⁽¹⁵⁾ as was the experience with school obesity prevention in Singapore primary schools ⁽¹⁵⁾
16. Positive language and evidence based approaches are essential. Prevention of childhood obesity should **not** aim to have “overweight” or “obese” children labeled as too fat. Preventive efforts should **not** give the child or their parents a message that they should start trying to lose weight, because this is likely to interfere with the child’s growth and is also likely to create weight concerns, dieting and disordered eating.
17. In particular, I recommend that government inquiry into obesity and any approaches to childhood obesity prevention should-
 - Avoid adding to the current media and moral panic around the topic of childhood obesity. I suggest that your inquiry focuses on the careful use of language, in your media releases and thereafter, by focusing on positive outcomes such as “healthy growth and development of children and teens” rather than referring to an “epidemic”, “obesity prevention” “weight control” or any other use of the word “weight”
 - Provide a sensible, balanced message about child and adolescent health being comprised of physical, mental, emotional, psychological, social, cultural and spiritual dimensions ⁽¹²⁾ and not merely the absence of disease or, in this case, the absence of obesity. Child health is certainly not conferred by being in a so-called “healthy” weight range, nor is it achieved via the absence of obesity. Underweight also needs to be addressed as children often get the incorrect message that being thin is desirable.
 - Understand that positively focused public comment, media reports, interventions and programs are desirable, but negative messages are likely to raise undue concern among children and their parents. A non-sensationalist, non-blaming, non-shaming approach is most likely to engage parents, grandparents and teachers rather than frightening, blaming, alienating or angering them.
 - Cultural sensitivity is extremely important when discussing children and weight, especially since the latest research clearly shows an increased risk of obesity in the poorest children from certain ethnic groups.
 - Consultation with people from these communities and ethnic groups is required in order to properly assess what is desirable within communities and what can be

realistically achieved in a cooperative, community development approach to health promotion.

- A culturally appropriate approach to prevention can be achieved in schools and communities by properly designing and targeting sensible, balanced and previously tested health promotion messages to low income, disadvantaged communities, particularly those with an ethnically diverse population, as these children and adolescents seem most in need of such interventions and are most at risk of Type 2 diabetes.

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