



OBESITY IN AUSTRALIAN CHILDREN

The increasing problem of childhood obesity and its consequences is a major public health concern. In the past decade, excessive fatness has become the primary health problem among children in developed nations and, to some extent, in other parts of the world.¹

DEFINITION OF CHILDHOOD OBESITY

The measurement of overweight and obesity in children is difficult due to differences in maturation and growth rates. Measures such as Body Mass Index (BMI), growth charts and other measures of fat are used to determine if children are overweight or obese.²

There has been recent international agreement on the need to use BMI, adjusted for age and sex, to define obesity in children. A child is considered obese if his/her BMI exceeds the cut-off point for his/her age.^{2,3,4}

PREVALENCE OF CHILDHOOD OBESITY

The prevalence of overweight and obesity in children is increasing rapidly across the globe. Over the last 20 years, obesity rates in children have risen greatly in many countries around the world – what we can refer to as an ‘international epidemic of childhood obesity’.^{1,4}

Rates of childhood obesity in Australia are at one of the highest amongst developed nations. Around 25% of Australian children are currently overweight or obese, a huge jump from 5% in the 1960’s.^{5,6}

From 1985 to 1995, the level of combined overweight /obesity in Australian children more than doubled, whilst the level of obesity tripled in all age groups and for both sexes. In 1995, 21% of boys aged 2-17 years were overweight or obese, and 23% of girls. Over the 10-year period prior to 1995, the proportion of obese boys aged 7-15 years increased from 1.4% to

4.7% (a 3.3% increase), and the proportion of obese girls in this age group increased from 1.2% to 5.5% (a 4.3% increase; see Table 1).⁷

Table 1. Proportion of Australian children overweight and obese in 1985 and 1995.

Age	Boys			
	7-11		12-15	
BMI grade	1985	1995	1985	1995
Overweight	9.7	11.6	8.8	20.0
Obese	1.5	3.7	1.9	6.1
Overweight/obese	11.2	15.3	10.7	26.1
	Girls			
Age	7-11		12-15	
BMI grade	1985	1995	1985	1995
Overweight	11.0	17.2	10.1	14.5
Obese	1.9	6.3	1.3	4.4
Overweight/obese	12.9	23.5	11.4	18.9

Source: Magarey et al., 2001.⁷

Recently data has been collected on a regional basis indicating that the childhood obesity rates are not only increasing but accelerating. In a small 2000 survey of NSW Central Coast primary school children the rate of obesity in children 7-11 years was found to be 9.9% for boys and 7.1% for girls. Although the prevalence of combined overweight and obesity was 26.2% for boys and 28.4% for girls.⁸ In 2002 results from the South Australia’s Child Youth Help study indicated that obese preschoolers aged 4 years rose from 3.5% in girls and 3.2% in boys in 1995 to 5.8% for girls and 4.1% for boys in 2002.⁹ Data from the 2003 Sentinel Site for Obesity Prevention in Victoria indicated that 7.9% of 7 to 11 year olds were obese and 26.7% overweight.¹⁰ The NSW SPANS 2004 study showed that 25% of boys and 23.3% of girls were overweight or obese. The rate of overweight and obesity in boys peaks in Year 6 at 31.6% and peaks in Year 4 in girls at 30.1% (see Table 2).¹¹

The prevalence of overweight and obesity over the last 20 years has indicated that for boys the rate is increasing rapidly although the rate of overweight and obesity for girls is increasing but at a slower rate. Regardless of gender the prevalence of overweight and obesity among young people in NSW has risen from 20% in 1997 to 25% in 2004.¹¹

Important factors contributing to prevalence rates of childhood obesity in Australia include ethnicity and socio-economic status. The prevalence of overweight and obesity is greater

among: - Children from European or Middle-Eastern cultural backgrounds, and - Children from families of lower socio- economic status.¹² This suggests that there are definite ‘at-risk’ groups within the Australian population of children and adolescents. Childhood obesity in Australia is rising at an annual rate of 1%, a trend which suggests that half of all young Australians will be overweight by the year 2025.¹³

Table 2. Percentage of students who are overweight or obese, by school year

	Year K	Year 2	Year 4	Year 6	Year 8	Year 10	Overall
Boys							
Healthy weight	85.0	81.2	73.5	68.4	73.7	73.5	75.0
Overweight	8.4	11.6	19.1	22.2	18.2	19.6	17.3
Obese	6.6	7.2	7.4	9.4	8.2	7.0	7.7
Overweight + obese	15.0	18.8	26.5	31.6	26.4	26.6	25.0
Girls							
Healthy weight	79.4	77.6	70.0	76.6	76.2	81.2	76.7
Overweight	16.1	15.3	22.4	15.7	19.1	14.7	17.2
Obese	4.6	7.1	7.7	7.7	4.7	4.2	6.1
Overweight + obese	20.7	22.4	30.1	23.4	23.8	18.9	23.3

Source: Booth et al., 2006.¹¹

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