

7 Overweight and obesity

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General practice is a useful intervention point for health care and health promotion activities because general practice is usually the first contact point into the Australian health care system. In 2005–06, 88% of the Australian population visited a GP at least once.¹ GPs are therefore in an ideal position to interact one-on-one to individually counsel and advise the patient about their lifestyle choices and how these affect health and wellbeing.

This chapter focuses on prevalence of overweight and obesity in patients attending general practice, and the prevalence of different levels of obesity. It also investigates changes that have occurred over time in both adults aged 18 years and over and children aged 2 to 17 years. The length of consultation by patient body mass index (BMI) is investigated in both adults and children attending general practice.

Pathology ordered by GPs in the management of overweight/obesity is reported in Chapter 5.

7.1 Background

Overweight and obesity in the general population are increasing problems not only in Australia, but globally in the developed and developing world. The World Health Organization (WHO) has labelled the dramatic worldwide increase in obesity as a global epidemic², presenting a serious public health challenge for the 21st century. Much recent research effort has been aimed at overweight and obesity, with the National Health and Medical Research Council investing \$68.9 million between 2000 and 2007.³

It is estimated that overweight and obesity were responsible for 7.5% of the total burden of disease in Australia in 2003, ranking a close third after tobacco and high blood pressure.⁴ This contribution has increased from 4.3% in 1996 when overweight and obesity ranked fourth in total burden of disease after tobacco, physical inactivity and high blood pressure.⁵

Access Economics estimates the financial cost of obesity in Australia in 2008 as \$8.3 billion, mainly comprised of productivity loss (44%), health system (24%) and carer costs (23%) – up from \$3.8 billion in 2005, and growing exponentially.⁶

Specific policies and initiatives

- In April 2008 Australian health ministers agreed to make obesity a National Health Priority Area. At the same time, the Minister appointed the Preventative Health Taskforce and tasked them with developing the National Preventative Health Strategy. The Strategy, to be provided to Government in June 2009, will provide advice on options for addressing obesity.⁷

- To facilitate consultation in the development of the Strategy, the Taskforce released a discussion paper in October 2008 titled 'Australia: The Healthiest Country by 2020' and a technical paper focussing on obesity titled *Obesity in Australia: a need for urgent action*.⁸ The technical paper details a number of recommended initiatives, including regulating the marketing of unhealthy foods and beverages directed at children, reshaping the food supply towards lower risk products (for example, by increasing taxes on unhealthy energy dense foods), and encouraging physical activity (for example, by increasing tax breaks on recreation and fitness-related products). Other initiatives include improving public health and information, reshaping urban environments to encourage healthy options, and strengthening, upskilling and supporting primary healthcare workers to encourage healthier choices in the population.
- In October 2008, the Australian Government launched a national campaign called 'Measure Up' which it regards as an important element in the fight against obesity. The campaign encourages Australian adults to measure their waist to identify whether or not they are at risk of developing some lifestyle related chronic diseases. The campaign states that for women, a waist measurement of over 80 centimetres (cm) indicates an increased risk of developing a chronic disease, and for a waist measurement of over 88 cm the risk greatly increases. For men, waist measurements over 94 cm and 102 cm indicate increased and greatly increased risk of developing a chronic disease.⁹
- In December 2008, the Australian Government announced fast-tracked funding of \$580 million from the Higher Education Endowment Fund towards 11 selected projects to build Australian infrastructure and strengthen research facilities in Australian universities. The largest of these successful projects, pledging \$95 million, was a Sydney University initiative to establish The Centre for Obesity, Diabetes and Cardiovascular Disease.¹⁰ The centre aims to conduct internationally significant collaborative research with other prestigious international universities, and attract world-class clinicians and researchers to Sydney. The centre will be one of the world's first to do thematic research on the connectivity between obesity, diabetes and cardiovascular disease.¹¹

Overweight and obesity in adults

Apart from the BEACH program, two recent national studies have estimated the prevalence of overweight and obesity in Australian adults. The 2004–05 National Health Survey (NHS) used self-reported height and weight to calculate BMI, and reported 62% of adult males and 45% of adult females aged 18 years or more were overweight or obese (excluding those adults for whom BMI could not be derived as height and/or weight were not stated)—an increase from 58% of males and 42% of females in the 2001 NHS, and 52% of males and 37% of females in the 1995 NHS.¹²

The Australian Diabetes, Obesity and Lifestyle Study (AusDiab) in 1999–00 used measured height and weight to calculate BMI in adults aged 25 years and over. AusDiab estimated 68% of males and 52% of females were overweight or obese.¹³ The AusDiab estimates suggest that a higher prevalence of overweight and obesity is identified with measured rather than self-reported (NHS) data, which is supported by other Australian research suggesting self-report of height and weight may underestimate BMI.¹⁴

The 2007–08 NHS collected both self-reported and measured height and weight as well as measured waist circumference from all participants. Initial summary results published in May 2009 indicated that 62% of adults were overweight or obese based on measured data, compared with 56% based on self-reported data.¹⁵

Overweight and obesity in children

Overweight and obesity are also problems in childhood and adolescence, and are a particular focus of the Australian Government preventative health initiatives. At present, about one in four children in the United Kingdom¹⁶ and Australia^{17,18}, and one in three children in the United States¹⁹ are overweight or obese. Recently published BEACH data for the period April 2002 to March 2008 estimate that 29.6% of all children aged 2 to 17 years who present to general practice are overweight or obese: 30.6% of male children and 28.7% of female children.²⁰ The New South Wales Schools Physical Activity and Nutrition Survey (SPANS), carried out in 2004, studied children aged 5-16 years in New South Wales schools, and found that 25% of boys and 23.3% of girls were either overweight or obese.²¹ The 2007 Australian National Children's Nutritional and Physical Activity Survey (Children's Survey) reported that 23% of children aged 2-16 years were either overweight (17%) or obese (6%), based on interviewer-measured height and weight data; however confidence intervals are not provided for the prevalence reported. This study also reports the mean waist girth for boys and girls by age group. In 2007, on average, about one in six children has a waist to girth greater than the recommended ratio.²² Initial results from the 2007-08 NHS suggested that based on measured height and weight, 25% of children aged 5-17 years were classified as overweight (17%) or obese (7.8%). The proportions of male (26%) and female (24%) children classified as overweight/obese were similar.¹⁵

The BEACH program is a valuable research tool, as it can provide updated current prevalence estimates of overweight/obesity in a sample of adults and children attending general practice on a yearly basis in the published annual reports.

7.2 Method

Since April 1998, a section on the bottom of the BEACH encounter form has been used to investigate aspects of patient health or health care delivery not included in the general practice consultation-based information. These substudies are referred to as SAND (Supplementary Analysis of Nominated Data). SAND methods are described in Chapter 2.

Self- or carer-reported patient risk factors are recorded for a subsample of 40 of the 100 GP-patient encounters. The risk factors used in this chapter are height (centimetre, without shoes) and weight (kilograms, unclothed), from which BMI is calculated as weight (kilograms)/height² (metres). Encounter start time and end time, for calculation of consultation length, have also been collected with these patient risk factors from 2000-01 onwards. Consultation length was calculated in minutes, as end time minus start time for data collected from 2000-01 onwards.

Adult BMI cut-offs are classified according to the World Health Organization guidelines which indicate a BMI of less than 18.50 is underweight, 18.50-24.99 is normal weight, 25.00-29.99 is overweight and equal to or more than 30.00 obese. Obesity is further grouped into Obese Class I (BMI 30.00-34.99), Obese Class II (BMI 35.00-39.99) and Obese Class III (BMI \geq 40.00).²³

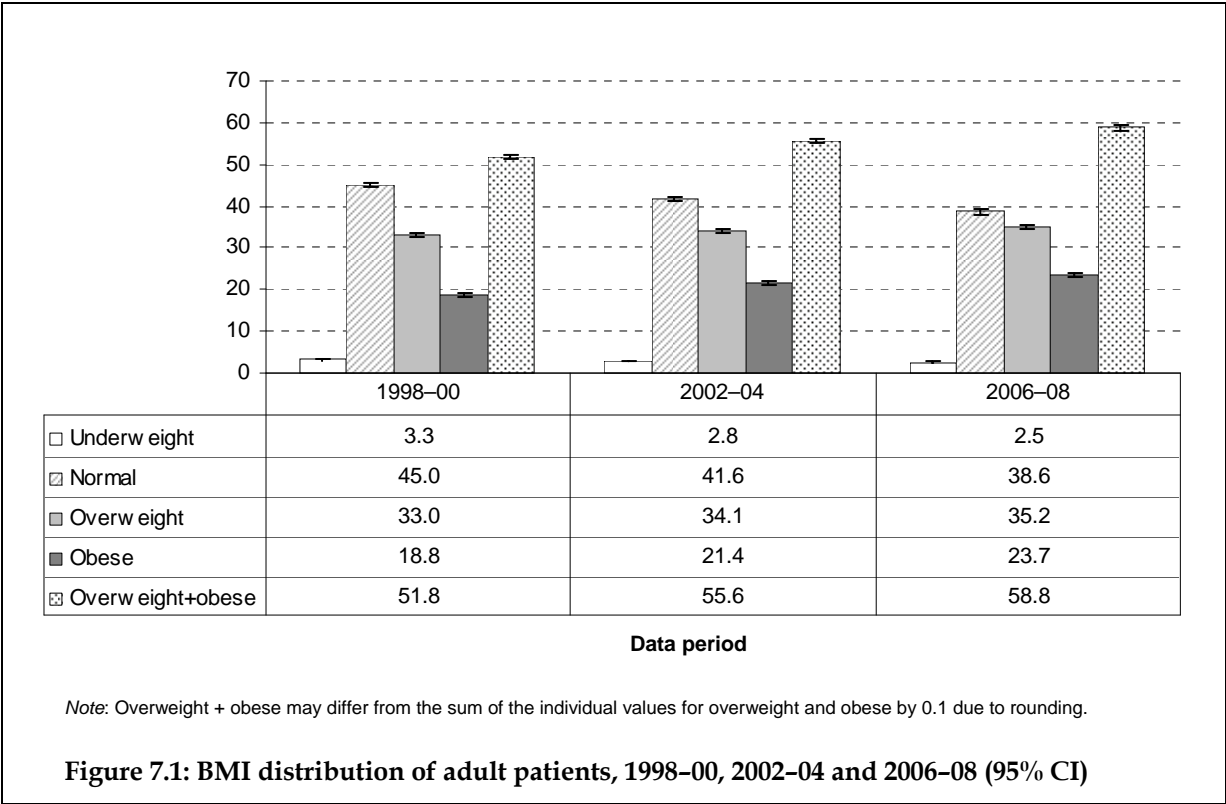
The standard BMI cut-offs described above are not appropriate in the case of children. Cole et al. developed a method that calculates the age-sex-specific BMI cut-off levels for overweight and obesity in children aged 2-17 years; at age 18 years it equates to the adult definitions.²⁴ This method categorises childhood BMI into three groups: underweight/normal, overweight and obese.²⁵

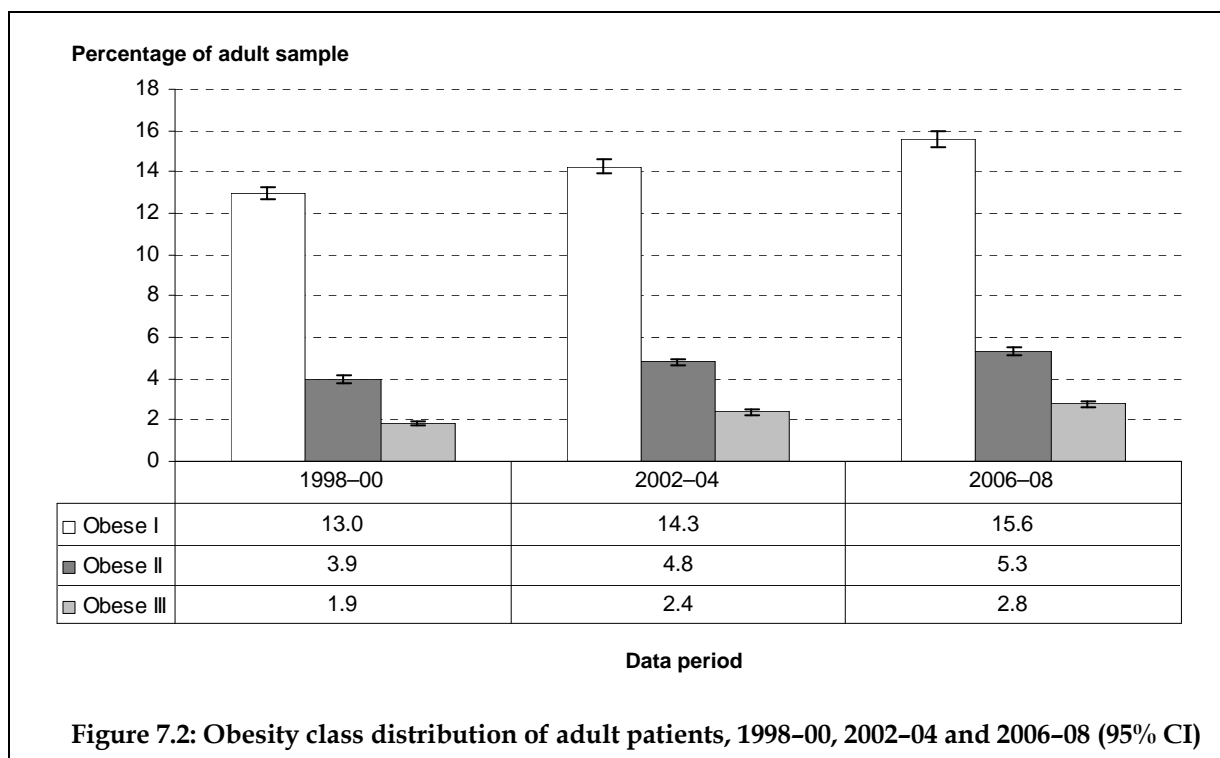
To investigate changes in prevalence in adults aged 18 years and over, and in children aged 2–17 years, three 2-year time periods are compared: April 1998–March 2000, April 2002–March 2004 and April 2006–March 2008 (subsequently labelled 1998–00, 2002–04 and 2006–08). The age distribution of children did not differ across these three time periods, so age standardisation was not necessary. The age distribution of adults differed across these three time periods, so age standardisation was done. The age-standardised results did not differ significantly from the crude rates, so crude rates are presented.

7.3 BEACH prevalence of overweight/obesity in adults

The substudies included responses for 63,401 adults in 1998–00, 64,235 in 2002–04 and 63,396 in 2006–08.

The prevalence of overweight/obesity in adult patients seen at general practice encounters increased steadily between 1998–00 and 2006–08 from 51.8% (95% CI: 51.2–52.4) to 58.8% (95% CI: 58.2–59.5). Split into the individual components, the prevalence of overweight significantly increased from 33.0% (95% CI: 32.6–33.5) to 35.2% (95% CI: 34.8–35.6), as did the prevalence of obesity from 18.8% (95% CI: 18.3–19.2) to 23.7% (95% CI: 23.2–24.2) (Figure 7.1). These increases are statistically significant and clinically important as overweight and obesity are major risk factors for a number chronic conditions, including Type 2 diabetes, cardiovascular disease and cancer.²





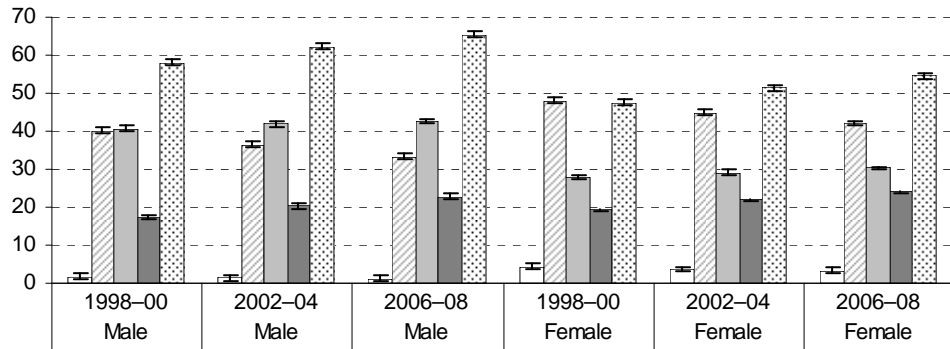
Taking this one step further and providing Australian data on levels of obesity not published elsewhere, obese adults were divided into three subgroups: WHO defined Obesity Class I, II and III.²³ This division provides further insight into the levels of obesity in the general practice population and the changes in these levels over this 10-year period (April 1998–March 2008).

The prevalence of all three obesity subgroups (Obese Class I, II and III) increased significantly between 1998-00 and 2006-08 from 13.0%, 3.9% and 1.9%, respectively, in 1998-00 to 15.6%, 5.3% and 2.8% in 2006-08 (Figure 7.2).

The prevalence of overweight/obesity among male adults increased from 58.1% in 1998-00 to 65.4% in 2006-08, and in female adults from 47.5% in 1998-00 to 54.5% in 2006-08 (Figure 7.3).

The increase in level of obesity by WHO defined subgroups (Obese Class I, II and III) can be seen among both male and female adults (Figure 7.4). Clearly, any public health messages need to be put to both the male and female population, as they are both facing the great health challenges presented by increasing levels of obesity over this 10-year period.

Percentage of adult sample



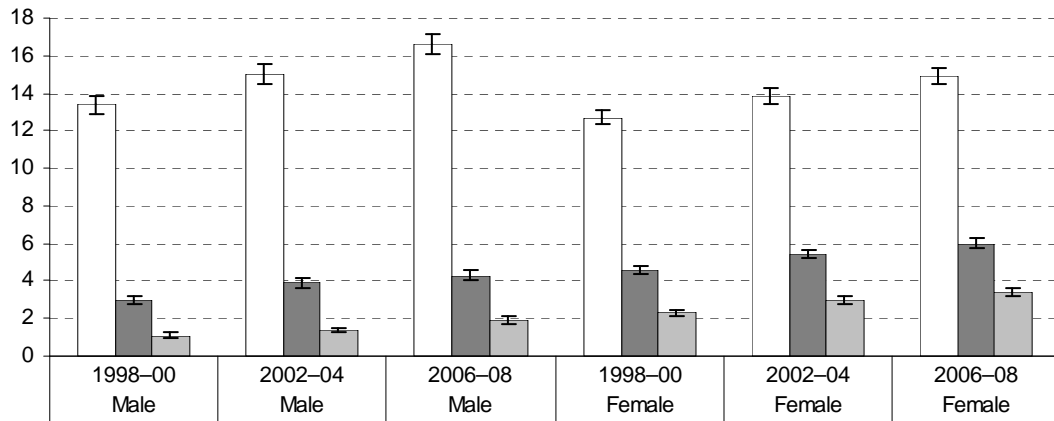
□ Underw eight	1.7	1.4	1.2	4.4	3.7	3.4
▨ Normal	40.2	36.4	33.4	48.1	44.9	42.1
▩ Overw eight	40.7	41.9	42.7	28.0	29.2	30.3
■ Obese	17.5	20.3	22.8	19.6	22.2	24.3
▤ Overw eight+obese	58.1	62.2	65.4	47.5	51.4	54.5

Data period by patient sex

Note: Overweight + obese may differ from the sum of the individual values for overweight and obese by 0.1 due to rounding.

Figure 7.3: Sex-specific BMI distribution of adult patients, 1998-00, 2002-04 and 2006-08 (95% CI)

Percentage of adult sample



□ Obese I	13.4	15.0	16.6	12.7	13.8	14.9
■ Obese II	3.0	3.9	4.3	4.6	5.4	6.0
▩ Obese III	1.1	1.4	1.9	2.3	3.0	3.4

Data period by patient sex

Figure 7.4: Sex-specific obesity class distribution of adult patients, 1998-00, 2002-04 and 2006-08 (95% CI)

Current prevalence in adults who attend general practice

Prevalence estimates based on 2006–08 BEACH data indicate that 58.8% of adults at general practice in Australia were overweight or obese (Figure 7.1). Sex-specific prevalence rates in adults were significantly different, with more male adults being overweight/obese (65.4%, 95% CI: 64.6–66.3) than females (54.5%, 95% CI: 53.8–55.3) (Figure 7.3). However, when divided into the individual components of overweight and obesity, female adult patients were significantly more likely to be obese than their male counterparts (24.3%, 95% CI: 23.7–24.9 compared with 22.8%, 95% CI: 22.1–23.4, respectively) (Figure 7.3).

Taking this one step further, the levels of severe obesity (that is, Obese Class II and III) in patients were investigated by sex. In 2006–08, adult female patients were significantly more likely to be severely obese (6.0% and 3.4%, Obese Class II and III) than male patients (4.3% and 1.9%). Therefore, adult males were significantly more likely to be overweight, while adult females were significantly more likely to be severely obese (Class II or III) (Figure 7.4).

In an unpublished study of the prevalence of overweight and obesity in an adult subsample of BEACH data, the crude prevalence rates was adjusted to account for varying age–sex attendance rates (that is, varying chance of patients being sampled based on their age and sex). The resulting adjusted prevalence (prevalence among all patients who attended a GP at least once in a year) did not differ from the crude rates.²⁶ Therefore, it seems reasonable to extrapolate these crude encounter rates to estimate prevalence among the adult general practice attending population (that is, all adults attending general practice at least once in a year). The Medicare Benefits Schedule (MBS) data show that in April 2007–March 2008, there were 7.1 million adult female patients who attended general practice at least once, and 5.8 million male adult patients (MBS general practice claims data April 2007–March 2008 supplied by the Australian Government Department of Health and Ageing).

Extrapolation of the 2006–08 BEACH prevalence estimates for adults suggest there were:

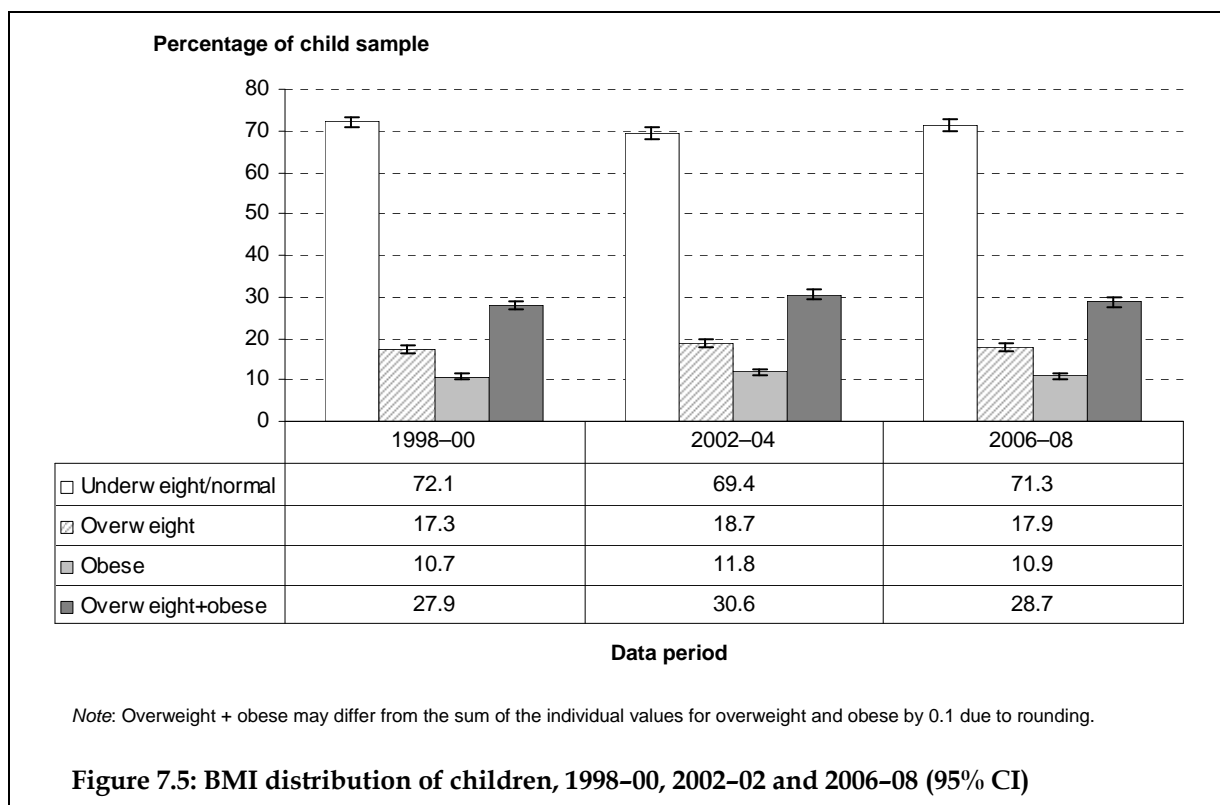
- about 1.71 million obese adult females who attended general practice, made up of: 1.05 million Obese Class I; 0.42 million Obese Class II; 0.24 million Obese Class III.
- about 1.32 million obese adult males who attended general practice, made up of: 0.96 million Obese Class I; 0.25 million Obese Class II; 0.11 million Obese Class III.

These results cannot be further extrapolated to the total Australian adult population, as any assumptions about the weight status of the 12% of the population who do not attend general practice cannot be made.

7.4 BEACH prevalence of overweight/obesity in children aged 2–17 years

Responses were received for 8,072 children aged 2–17 years in 1998–00, for 6,569 in 2002–04, and for 6,133 in 2006–08.

Over the 10-year period April 1998–March 2008, there was no change in the prevalence of overweight and obesity in children aged 2–17 years attending general practice. In 1998–00, 27.9% were classified as overweight or obese compared with 28.7% in 2006–08. During the intervening years, however, there was a significantly different peak when prevalence reached 30.6% (Figure 7.5).

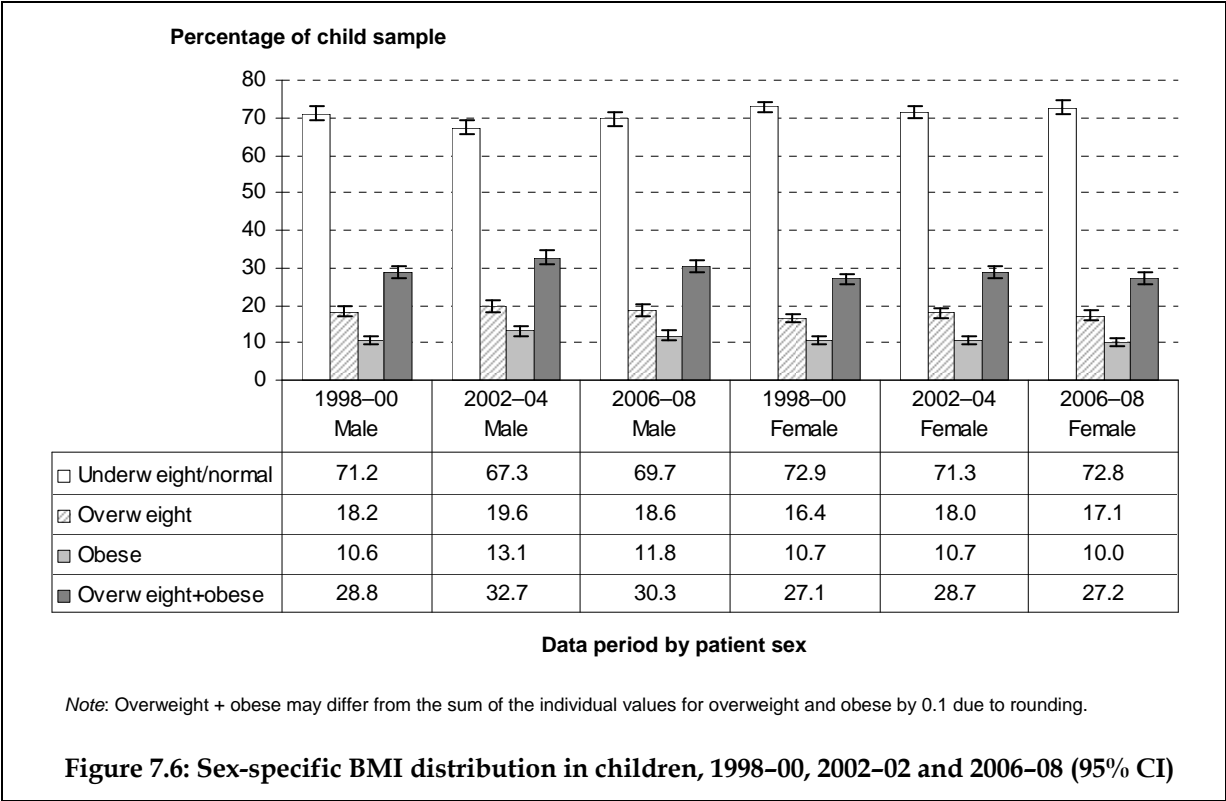


There was no significant change in the prevalence of overweight/obesity among both male and female children between 1998-00 and 2006-08 (28.8% to 30.3% in males and 27.1% to 27.2% in females) (Figure 7.6).

Recent, high levels of media attention on 'increasing levels of childhood obesity in Australia' are not supported by national BEACH data over the 10 years. The initial SPANS data reported, based on school children aged 5-16 years in NSW only, shows an increase of childhood overweight and obesity from 20% in 1995 to 25% in 2004, but does not supply *p* values or confidence intervals to indicate whether this change is statistically significant.²¹ More recent published data on the SPANS study provides odds ratios and 95% confidence intervals allowing statistical testing.²⁷ This indicates that over the period 1985 to 1997, the prevalence of overweight and obesity increased significantly among younger boys (grades 2, 4, 6) and older boys (grades 8, 10) and younger girls (grades 2, 4, 6). Over the period 1997 to 2004, the prevalence of overweight/obesity combined increased significantly among younger and older boys but not among girls.²⁷ It is very important to recognise that based on all recent Australian data, the levels of overweight/obesity in children are unacceptably high, and present a major public health problem that needs to be tackled. The increased media attention highlights this problem, spurring on much-welcomed debate and attention by government and policy makers.

Current prevalence in children who attend general practice

Prevalence estimates based on 2006-08 BEACH data indicate that 28.7% of children aged 2-17 years at encounters in general practice were overweight (17.9%) or obese (10.9%) (Figure 7.5). Sex-specific prevalence rates in children in 2006-08 were not significantly different, with 30.3% of male children being overweight/obese compared with 27.2% of female children (Figure 7.6).



As discussed above, adjustment for age-sex-specific attendance rates among adults does not significantly change the crude rates.²⁶ Therefore, it seems reasonable to extrapolate the children’s crude encounter rates to estimate prevalence among the general practice-attending child population (that is, attending general practice at least once in a year).

The MBS data show that in April 2007–March 2008, 1.53 million female patients aged 2–17 years attended general practice at least once, and 1.59 million male patients aged 2–17 years (MBS general practice claims data April 2007–March 2008 supplied by the Australian Government Department of Health and Ageing).

Extrapolation of the 2006–08 BEACH prevalence estimates for children aged 2–17 years suggest:

- that of female children who attend general practice about 260,000 were overweight and about 150,000 were obese
- that of male children who attend general practice about 300,000 were overweight and about 190,000 million were obese.

These results cannot be further extrapolated to the total population of Australian children, as any assumptions about the weight status of the 12% of the population who do not attend general practice cannot be made.

7.5 Length of consultation by patient BMI

Length of consultation was calculated for encounters where start and end times were recorded by GPs. Only encounters recorded as claimable from Medicare as an A1 item of service have been included.

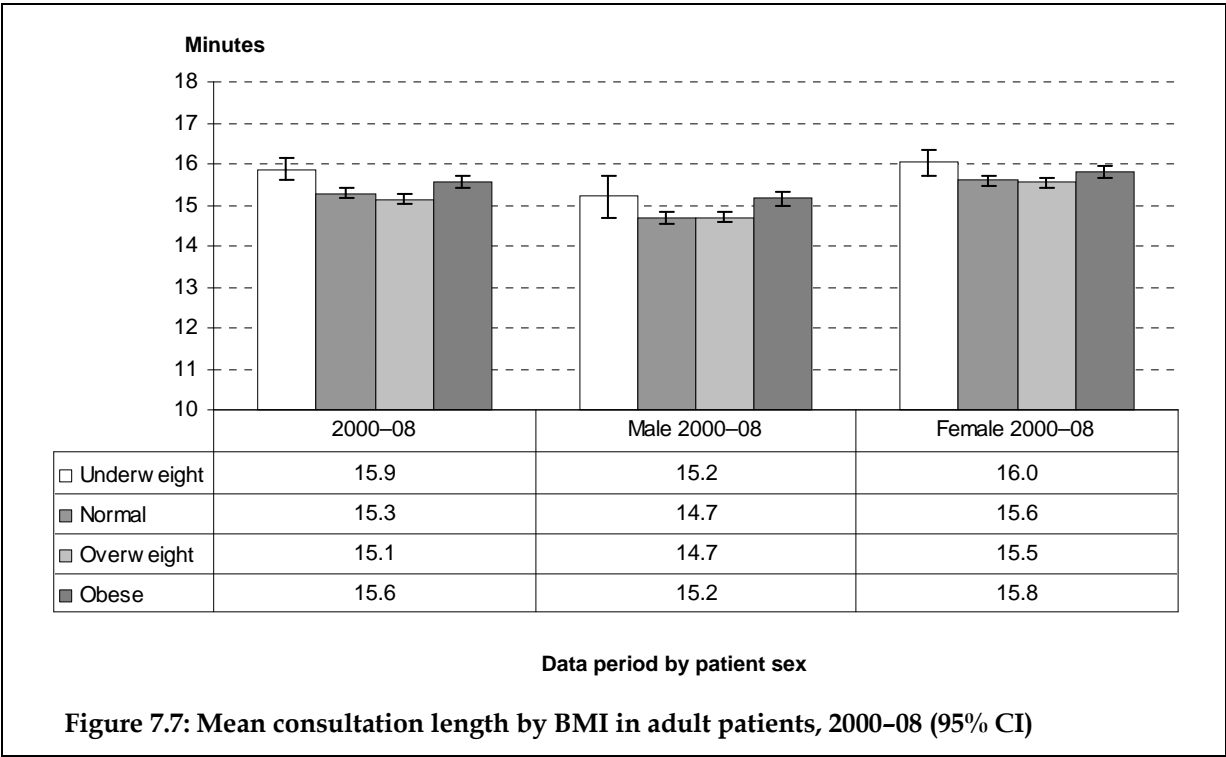
Length of consultation in adults

At the 212,918 BEACH encounters in 2000–08 with adults where consultation length was available, the mean length of consultation was 15.3 minutes (95% CI: 15.2–15.4). The mean consultation length of encounters with adult female patients were significantly longer (15.7 minutes 95% CI: 15.6–15.8) than those with adult male patients (14.8 minutes 95% CI: 14.7–14.9) (results not shown).

Consultations for the period 2000–08 were on average significantly longer for underweight and obese adult patients (15.9 and 15.6 minutes) than for those who were of normal weight or overweight (15.3 and 15.1 minutes) (Figure 7.7).

The overall pattern of mean consultation length by patient BMI remained similar by patient sex, although statistically significant differences were noted only for obese male adults who had longer consultations than normal weight and overweight males (Figure 7.7).

Consultation length by BMI category in adult patients were compared over time, using 2-year blocks of data (2000–02, 2002–04, 2004–06, 2006–08) and were found not to have changed over the period (results not shown).



Length of consultation in children

At the 22,457 BEACH encounters in 2000–08 with children aged 2–17 years where consultation length was available, the mean length of consultation was 12.3 minutes (95% CI: 12.2–12.4). The mean consultation length for female and male children did not differ (12.5 and 12.1 minutes, respectively) (results not shown). The overall pattern of mean consultation length in children by patient BMI remained similar by patient sex (results not shown).

Consultation length by BMI category in children were compared over time, using 4-year blocks of data (2000–04 and 2004–08), and were found not to have changed over the period (results not shown).

Length of consultation: comparing adults and children

General practice encounters with adults were on average longer than those with children aged 2–17 years (15.3 and 12.3 minutes, respectively) (results not shown).

As encounters with adults are already significantly longer, time constraints may limit the opportunity to add extra preventive care activities including lifestyle, dietary and exercise advice. At encounters with children, which are shorter, there may be more opportunity to tackle overweight and obesity as a clinical problem to be managed. Published data on BEACH encounters with children show that overweight and obesity are being managed at a low rate – once in every 58 encounters with an overweight or obese child.²⁰ This shows that even though encounters with children are shorter than those with adults, currently, the rate of management of overweight and obesity in children is low, and GPs are not taking the opportunities for management that are presented to them.

7.6 Discussion

The overall current BEACH prevalence of overweight and obesity in adults (58.8%) and children (28.7%) attending general practice is high, in line with international data showing disturbingly high population prevalence.

The 2004–05 NHS (based on self-report) estimated 53.3% of adults were overweight or obese.¹² The 2000–01 AusDiab study (based on measured height and weight), estimated 59.8% of adults aged 25 and over were overweight or obese.²⁸ More recently, the 2007–08 NHS indicated that 62% of adults were overweight or obese based on measured height and weight, compared with 56% based on participant self-report.¹⁵ Both the NHS and AusDiab are population-based and neither provides confidence intervals around these prevalence estimates, making it impossible to assess whether these estimates and those of BEACH are statistically significantly different.

The current BEACH prevalence estimates for adults are higher than those from the 2004–05 NHS, and lower than, but more aligned with the 2000–01 AusDiab study. The lower prevalence reported by 2004–05 NHS may be because the 2004–05 NHS was based on self-report. The 2007–08 NHS reports higher self-reported rates of overweight/obesity, and the measured rates are higher than the 2000–01 AusDiab (measured) rates, highlighting the continued upward trend in overweight and obesity in Australian adults. Recent Australian research suggest that self-reported height and weight may underestimate BMI.¹⁴ BEACH is also based on self-report, but patient self-report to a GP may be more accurate and reliable

than to an unknown interviewer (NHS) due to the trust inherent in the doctor–patient relationship, going some way to explaining why BEACH estimates are higher than NHS, but lower than AusDiab.

The fact that the BEACH estimates are lower than those from AusDiab may be because some adult overweight and obese patients are not attending general practice, and are therefore not counted in BEACH estimates, which are based on adults attending at least once.

Another possible explanation for lower BEACH estimates is that BEACH includes adults aged 18–24 years, and this group is not included in AusDiab. These young adults are more likely to be in the healthy weight range so that BEACH estimates will be a little lower due to the inclusion of these young adults.

The AusDiab study is eight years old, and the prevalence of overweight and obesity in adults is likely to have increased, in line with the significant increase of overweight and obesity reported by the BEACH study from 1998–00 to 2006–08. The 2007–08 NHS collected both self-reported and measured height and weight data from all respondents, so these new NHS results reported in May 2009¹⁵ clearly show the continued increase in prevalence of overweight and obesity, and the differences between self-reported and measured BMI.

Prevalence of overweight and obesity in adults has increased over the 10 years to 2008, and the high rates pose a huge public health problem. The Australian Government has recognised overweight and obesity as a major public health problem that needs to be tackled⁷, and is allocating resources towards further research and public health campaigns.¹⁰

Even though estimates of current prevalence from BEACH show that a significantly greater proportion of adult males attending general practice are overweight/obese than female adults, the female adults are more likely than males to be severely obese. This may have implications for any policy initiatives. Those specifically aimed at obese adults should be aimed at both sexes – but additional focus to severe obesity in women may also be beneficial.

The current BEACH prevalence of overweight and obesity in children aged 2–17 years is 28.7%. In contrast, the 2004 NSW SPANS study (based on measured height and weight), estimated about 24% of children aged 5–16 years were overweight or obese.²¹ The more recent 2007 Children’s Survey (based on interviewer-measured height and weight) estimated 23% of children aged 2–16 years were either overweight (17%) or obese (6%).²² SPANS and the Children’s Survey report similar prevalence of overweight and obesity in children; however, neither provides confidence intervals around these prevalence estimates, making it impossible to assess whether these estimates and those of BEACH are statistically significantly different. The recently published 2007–08 NHS indicate that 25% of children aged 5–17 years were overweight (17%) or obese (7.8%) based on measured data.

BEACH data report a higher current prevalence than SPANS, the Children’s Survey and the 2007–08 NHS, which would be explained if the children attending general practice (a sample of whom are surveyed by BEACH) are more likely to be overweight and obese. The difference between BEACH and SPANS/Children’s Survey/NHS would be further exacerbated if BEACH is underestimating overweight and obesity among children attending general practice due self- or carer-reported data, which tends to underestimate BMI.¹⁴

The SPANS study reports an increase in prevalence of overweight and obesity in school-aged boys between 1997 and 2004, but not among girls. The 2007 Children’s Survey has similar estimates to the 2004 SPANS study, suggesting there has not been an increase in prevalence between 2004 and 2007.

BEACH suggests there was no change in prevalence of overweight and obesity in children aged 2–17 years between 1998 and 2008. It must be noted that BEACH data cover children who attend general practice and cannot be extrapolated to the total childhood population.

Regardless of whether prevalence of overweight and obesity in children is rising or static, the fact remains that the current prevalence of around 23% according to the Children's Survey, or 28.7% according to BEACH data, is alarmingly high, and an issue that definitely needs to be tackled. Certainly the prevalence among children attending general practice provides GPs with opportunities to intervene.

It is interesting to note that consultations with adults were significantly longer for those classified as underweight or obese than for those classified as normal or overweight. This has workforce implications for the already heavily burdened GP population. As the proportion of the adult population classified as obese increases, so too will the workload of GPs. In 2008, obesity was announced as a National Health Priority Area⁷, and a recent Australian Government media release suggested a review of the Medicare schedule with consideration of new incentive items encouraging longer consultations.²⁹ Such initiatives, although welcomed by many, will place further pressure on the already stretched GP workforce, particularly in rural areas.

It is well documented that infertility is related to overweight and obesity.^{30,31} The use of assisted reproductive technologies and in-vitro-fertilisation in Australia are increasing.³² These techniques are heavily Medicare subsidised, and contribute significantly to Australian Government health spending. Similarly overweight and obesity are major risk factors for other chronic conditions including Type 2 diabetes, cardiovascular disease and cancer², and have a huge impact on health spending. Any policies and initiatives that are successful in reducing the prevalence of overweight and obesity in Australian adults will directly contribute to reducing Australian Government health spending.

Britt et al. investigated the occurrence of patient multimorbidities in BEACH SAND but this initial work did not include obesity as a morbidity domain.³³ Further SAND data collection on multimorbidity currently in the field includes 'Obesity (BMI>30)' as a morbidity domain, so prevalence of specific comorbidities of obesity could be reported at a future time.

The Australian Government's plans to expand and enhance research capacity in the area of overweight and obesity by partially funding the newly created Centre for Obesity, Diabetes and Cardiovascular Disease at the University of Sydney, due for completion by 2013.¹¹ The substantial funding provided in December 2008 by a fast-tracked Australian Government grant¹⁰ again highlights the recognition of overweight as a major Australian public health problem needing immediate action.

7.7 Conclusion

The prevalence of overweight and obesity in the populations of adults and children attending general practice in Australia are high, in line with international trends. The Australian Government is in the process of formulating a coordinated and multifactorial approach to this major public health problem. The preventive health care approach being taken may be appropriate, but it remains to be seen what specific policies will be developed to tackle this important issue.

Suggested chapter citation

Valenti L 2009. Overweight and obesity. In: Britt H, Miller GC (eds). General practice activity in Australia, priorities and policies 1998 to 2008. General practice series no. 24. Cat. no. GEP 24. Canberra: AIHW.

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