

2.24 Prevalence of overweight and obesity

The prevalence of overweight and obesity among Aboriginal and Torres Strait Islander adults and children

Data sources

Data on the prevalence of overweight and obesity among Aboriginal and Torres Strait Islander adults come from the 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS).

The 2004–05 NATSIHS collected information from 10,439 Indigenous Australians of all ages. This sample was considerably larger than the supplementary Indigenous samples in the 1995 and 2001 National Health Surveys. The survey was conducted in remote and non-remote areas of Australia and collected a range of information from Indigenous Australians about health-related issues including health-related actions, health risk factors, health status, socioeconomic circumstances and women's health. It is planned to repeat the NATSIHS at six-yearly intervals, with the next NATSIHS to be conducted in 2010–11.

Data for this measure are based on information collected on self-reported height and weight. These measures were used to calculate body mass index (BMI) and categorise respondents into categories of underweight, acceptable weight, overweight and obese. It should be noted that for approximately 16% of Indigenous Australians and 8% of non-Indigenous Australians, self-reported height and weight were not known or not stated.

Based on the *National Health Data Dictionary* BMI cut-offs for adults:

- overweight is a BMI of at least 25 kg/m² and less than 30 kg/m²
- obese is a BMI of at least 30 kg/m².

For children, overweight and obesity are defined using the same BMI cut-offs as for adults after age–sex adjustment.

Data analyses

No data are currently available on the prevalence of overweight and obesity among Aboriginal and Torres Strait Islander children.

Prevalence of overweight and obesity

- After adjusting for differences in age structure, in 2004–05, approximately 3% of Indigenous Australians aged 18 years and over were underweight, 27% were of acceptable weight, 26% were overweight and 28% were obese and for 16%, body mass was not known. In comparison, 2% of non-Indigenous adults were underweight, 41% were of acceptable weight, 33% were overweight and 16% were classified as obese and for 8%, body mass was not known (Table 2.24.1). Non-Indigenous Australians were therefore more likely to be of acceptable weight or overweight, while Indigenous Australians were more likely to be obese.

- Of those with a known body mass index, approximately 4% of Indigenous Australians aged 18 years and over were underweight, 32% were of acceptable weight, 31% were overweight and 34% were obese. In comparison, 3% of non-Indigenous adults were underweight, 44% were of acceptable weight, 36% were overweight and 18% were classified as obese (Figure 2.24.1).

Prevalence of overweight and obesity by age and sex

- Both Indigenous and non-Indigenous adults were most likely to be overweight or obese at ages 45–54 years and 55 years and over. In these age groups, between 59% and 60% of Indigenous people, and between 54% and 56% of non-Indigenous people, were overweight or obese.
- A higher proportion of Indigenous males were overweight (32%) compared to Indigenous females (20%), however, Indigenous females were more likely to be obese (29% compared to 27% for Indigenous males).

Table 2.24.1: Proportion of adults who are underweight, of acceptable weight, overweight or obese, by Indigenous status, sex and age group, 2004–05

	18–24		25–34		35–44		45–54		55+		Total ^(a)	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
Males												
Underweight	4.3 ^(b)	2.9	2.6 ^(b)	0.6 ^(c)	1.2 ^(b)	0.6 ^(b)	2.7 ^(b)	0.3 ^(c)	1.3 ^(b)	1.0	2.1*	1.0*
Acceptable weight	42.4*	57.5*	34.2	38.4	29.3	27.7	24.3	27.5	20.6*	33.3*	28.2*	35.2*
Overweight	26.6	26.3	34.3	40.7	28.3*	44.5*	34.4*	43.3*	33.0*	42.9*	31.9*	40.8*
Obese	15.2*	6.3*	21.9	16.8	32.6*	21.0*	29.4	23.1	30.4*	17.9*	27.4*	17.8*
Not known	11.4*	7.1*	7.0*	3.5*	8.7	6.2	9.2	5.7	14.6*	4.8*	10.5*	5.3*
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Females												
Underweight	7.8	9.2	4.1 ^(b)	4.5	5.4 ^(b)	3.2	2.9 ^(b)	1.8	2.4 ^(b)	2.9	4.1	3.9
Acceptable weight	39.5*	55.9*	31.5*	51.9*	23.7*	49.0*	24.2*	42.4*	18.4*	37.8*	25.6*	46.0*
Overweight	15.5	17.3	18.0	22.4	20.0	23.6	21.8	26.9	23.0	29.2	20.3*	24.8*
Obese	14.7*	7.2*	28.4*	12.7*	29.9*	14.7*	33.9*	18.0*	32.8*	18.0*	29.4*	14.9*
Not known	22.6*	10.5*	18.0*	8.5*	20.9*	9.5*	17.2*	10.8*	23.5*	12.2*	20.6*	10.5*
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(continued)

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	18–24		25–34		35–44		45–54		55+		Total ^(a)	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
Persons												
Underweight	6.1	6.0	3.4	2.5	3.5 ^{(b)*}	1.9*	2.8 ^{(b)*}	1.1*	1.9 ^(b)	2.0	3.2*	2.4*
Acceptable weight	40.9*	56.7*	32.7*	45.2*	26.3*	38.4*	24.2*	35.1*	19.4*	35.7*	26.8*	40.7*
Overweight	20.7	21.9	25.6*	31.5*	23.8*	34*	27.8*	35.0*	27.6*	35.8*	25.7*	32.6*
Obese	14.9*	6.7*	25.4*	14.7*	31.1*	17.8*	31.8*	20.5*	31.7*	18.0*	28.4*	16.3*
Not known	17.3*	8.8*	12.9*	6.1*	15.3*	7.9*	13.4*	8.3*	19.4*	8.7*	15.9*	7.9*
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total no.	56,723	1,857,078	69,772	2,761,354	59,057	2,899,566	39,578	2,705,580	33,167	4,529,678	258,297	14,753,256

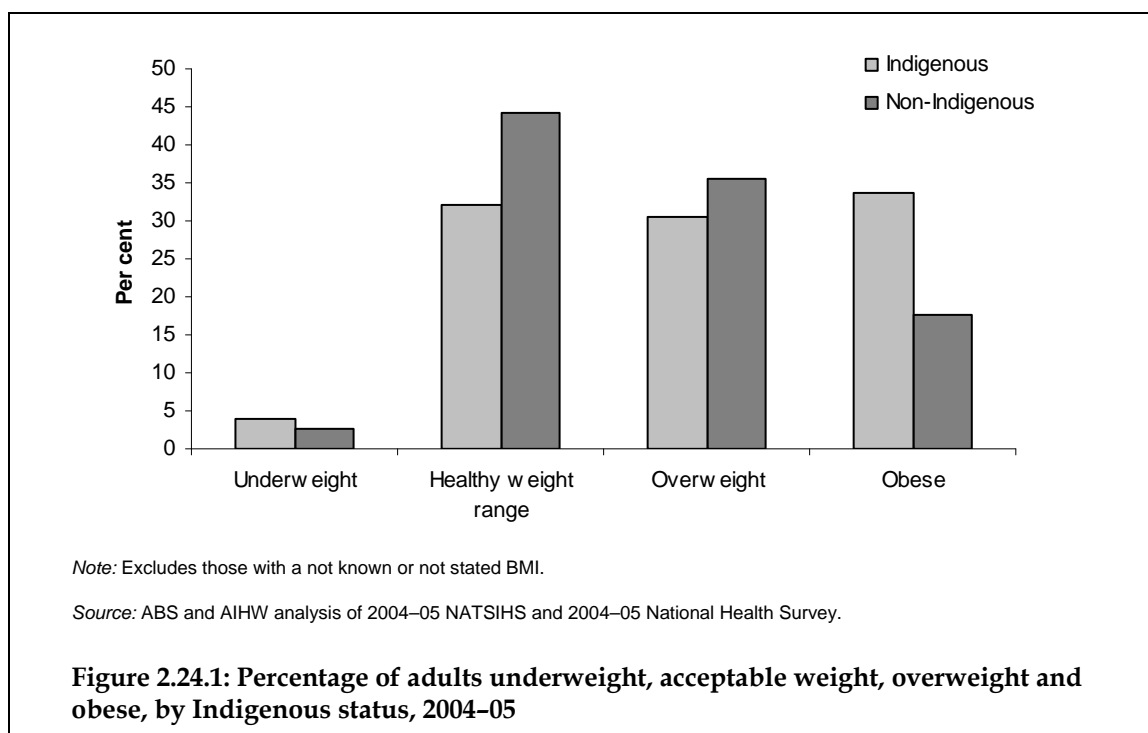
* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons.

(a) Age-standardised proportions.

(b) Estimate has a relative standard error of 25% to 50% and should be used with caution.

(c) Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Source: ABS and AIHW analysis of 2004–05 NATSIHS and 2004–05 National Health Survey.



Time series analysis

- There has been no significant change in the prevalence of overweight and obesity among Indigenous Australians between 2001 and 2004-05 (59% and 60% respectively among those with a known BMI).
- In non-remote areas of Australia, approximately 51% of Indigenous Australians were overweight and obese in 1995, which was lower than the proportions reported in 2001 (56%) and 2004-05 (60%) (Table 2.24.2).

Table 2.24.2: Proportion of Indigenous Australians aged 18 years who are overweight/obese, by remoteness, 1995, 2001 and 2004-05

	1995	2001	2004-05
Remote	n.a.	61	60
Non-remote	51	56	60
Total	n.a.	59	60
Total number who reported a BMI	116,340	195,191	218,714

Note: Excludes those with a not known or not stated BMI.

Source: ABS and AIHW analysis of the 1995 and 2001 National Health Surveys (Indigenous supplement) and 2004-05 NATSIHS.

Data quality issues

National Aboriginal and Torres Strait Islander Health Survey (NATSIHS)

The NATSIHS overcomes many of the problems of under-identification in the administrative data collections as the Indigenous status question is asked of all respondents. The NATSIHS sample was specifically designed to select a representative sample of Aboriginal and Torres Strait Islander Australians and thus overcomes the problem inherent in most national surveys with small and unrepresentative Indigenous samples. The NATSIHS also uses the standard Indigenous status question.

Information recorded in this survey is essentially 'as reported' by respondents. Responses may be affected by imperfect recall or individual interpretation of survey questions.

Non-Indigenous comparisons are available through the National Health Survey. The survey was conducted in major cities, regional and remote areas, but very remote areas were excluded from the sample.

In remote communities there were some modifications to the NATSIHS content in order to address language and cultural appropriateness in traditional communities, as well as to assist respondents in understanding the concepts. Some questions were excluded and some reworded. Also, paper forms were used in remote areas and compute- assisted interview instruments were used in non-remote areas.

Further information on NATSIHS data quality issues can be found in the national publication (ABS 2006).

Overweight and obesity data

The quality of BMI as a measure of overweight and obesity has a number of issues: the reliability of self-reported height and weight; under-reporting; mixed methods of collection of weight and height; and interpretation of BMI cut-offs in children.

Self-reported height and weight has been found to over-estimate height and under-estimate weight thus under-estimating the resultant BMI. An analysis of the 1995 National Health Survey and 1995 National Nutrition Survey (ABS 1998), in which both self-reported and measured height and weight data were collected, found that 27% of males and 28% of females would have been classified to a different, predominately heavier, BMI category. This analysis did not explore data from the Aboriginal and Torres Strait Islander respondents; however, there was little difference between different ethnic and socioeconomic groups. The report concludes:

Based on the findings from this study, there may be grounds for questioning the reliability, and hence the use and interpretation, of BMI results based on self-reported height and weight.

In the 2004–05 NATSIHS and National Health Survey the height and weight information could not be obtained for approximately 16% of Indigenous Australians and 8% of non-Indigenous Australians (ABS 2002). With a large non-response rate there may be issues with bias. In the 1994 NATSIHS an assessment of potential bias due to non-measurement concluded that there would have been only small differences if the whole population was measured; however, this assessment was based on an imputation method that assumed that people with similar characteristics had similar weight and height (Cunningham & Mackerras 1998).

Height and weight were self-reported in the 2004–05 National Health Survey except in remote areas where respondents to the Indigenous survey were offered the opportunity to be weighed or measured if they were unsure of their weight or height (ABS 2003). Given the known problems with self-reporting of height and weight, care needs to be exercised in interpretation of results given the mixed methods used, especially when the analysis is split by remoteness.

References

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