

Evidence Matters

Every young South Australian Counts!



Policy Brief 2 *The hidden cost of young South Australians shaping up for an unhealthy future*

Altering a life-long trajectory of weight-related health problems that will be a heavy burden for individuals and the state requires robust data on which to build prevention and intervention strategies.

South Australia does not have an adequate monitoring mechanism to track the prevalence and incidence of overweight and obesity from early childhood and provide the data needed to develop appropriately targeted evidence-based programs.

It is estimated that, worldwide, 39 million children under 5 years were overweight or obese in 2020.¹

In South Australia, 20% of children under 5 years were reportedly overweight or obese in the last National Health Survey.²

Being overweight or obese in childhood is predictive of overweight or obesity in adolescence and adulthood, with life-long health impacts.

Overweight and obesity in adults is associated with greatly increased risk of Type II Diabetes, cardiovascular disorders including high blood pressure and stroke, certain types of cancer and metabolic disorders.

Obesity is also associated with skeletal and joint problems,

activity levels and psychological health issues.

The impacts of overweight or obese populations have increased over time, particularly in developed countries, resulting in substantial increases in overall health care costs.³ To reduce the burden of disease at a population level, prevention should begin in early childhood.

Conditions predisposing one to being overweight as a young child include perinatal factors such as overweight mothers, gestational diabetes and paternal obesity. In Australia, the increasing prevalence rates of gestational diabetes alone would predict increasing rates of childhood overweight and obesity levels.⁴

What evidence do we have?

In South Australia, the 2017-2018 National Health Survey reported an estimate of 82,100 (25.6%) children and young people (2-17 years) as being overweight or obese.⁸

Of these 82,100 children and young people, 18.9% were estimated to be overweight ie, a Body Mass Index (BMI) of 25.0 to 29.9 and 7.5% were estimated to be obese ie, a BMI of 30.0 or over.

A deeper dive into these mutually exclusive age categories of the National Health Survey reveals that young people (10-17 years) had a higher rate of overweight or obesity than children (2-9 years).

Figure 1 below shows the occurrence of overweight and obesity among South Australia's children and young people (2-17 years) from the National Health Survey (2014-2015, 2017-2018) – a triennial survey conducted by the Australian Bureau of Statistics.

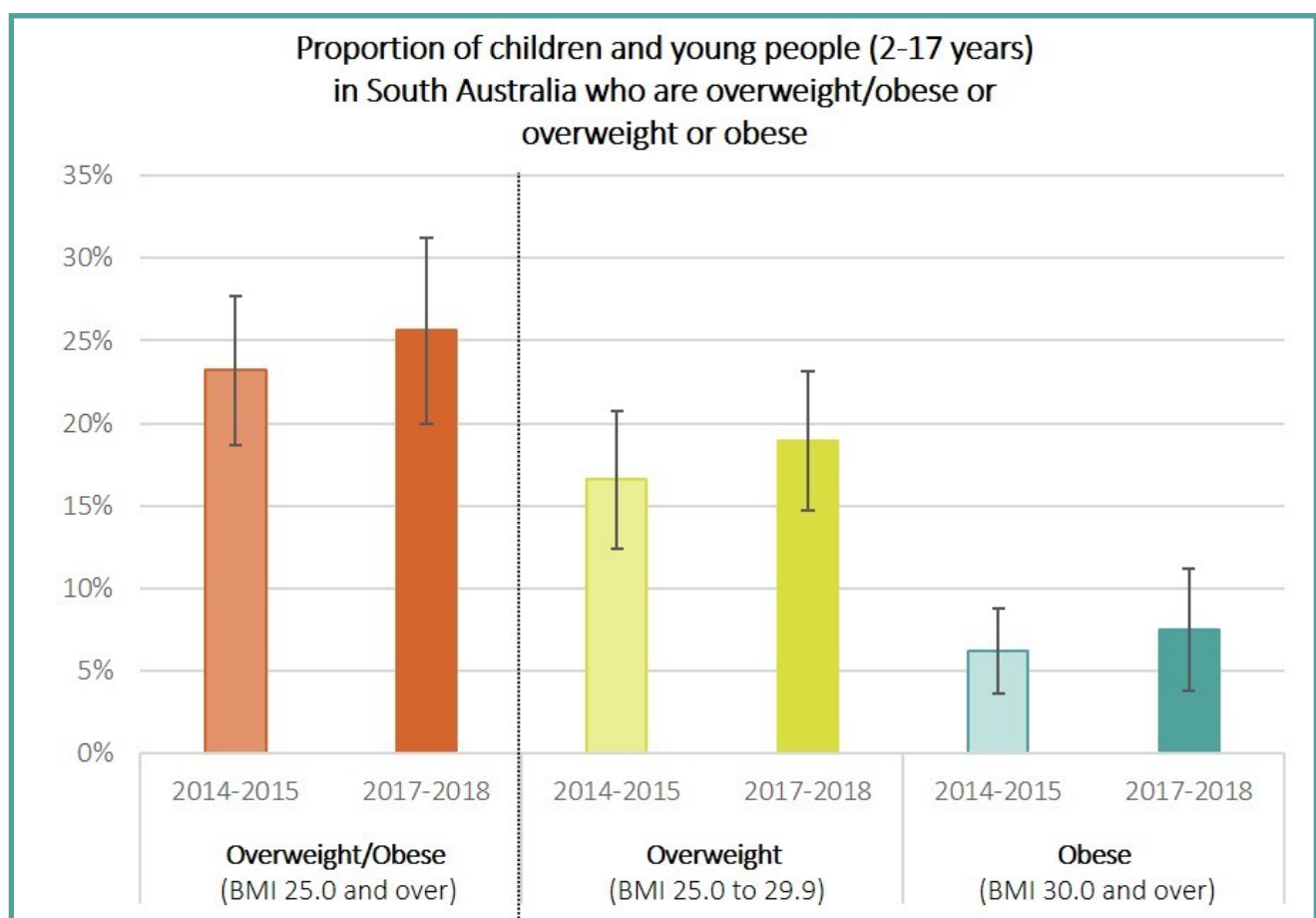


Figure 1 Proportion of overweight/obese or overweight or obese South Australian children and young people (2-17 years) from the 2014-2015 and 2017-2018 National Health Surveys.^{5, 6, 7}

Preventing weight gain is easier than achieving weight loss once already overweight and the likelihood of being overweight or obese increases as a person ages.

Better outcomes are achieved when prevention occurs **early in life**. It is also more **cost-effective**.

Evidence-informed strategies for the prevention of overweight and obesity are crucial.

Figure 2 below shows that the incidence of being overweight or obese is significantly higher for young people (25.1%) than for children (12.6%).

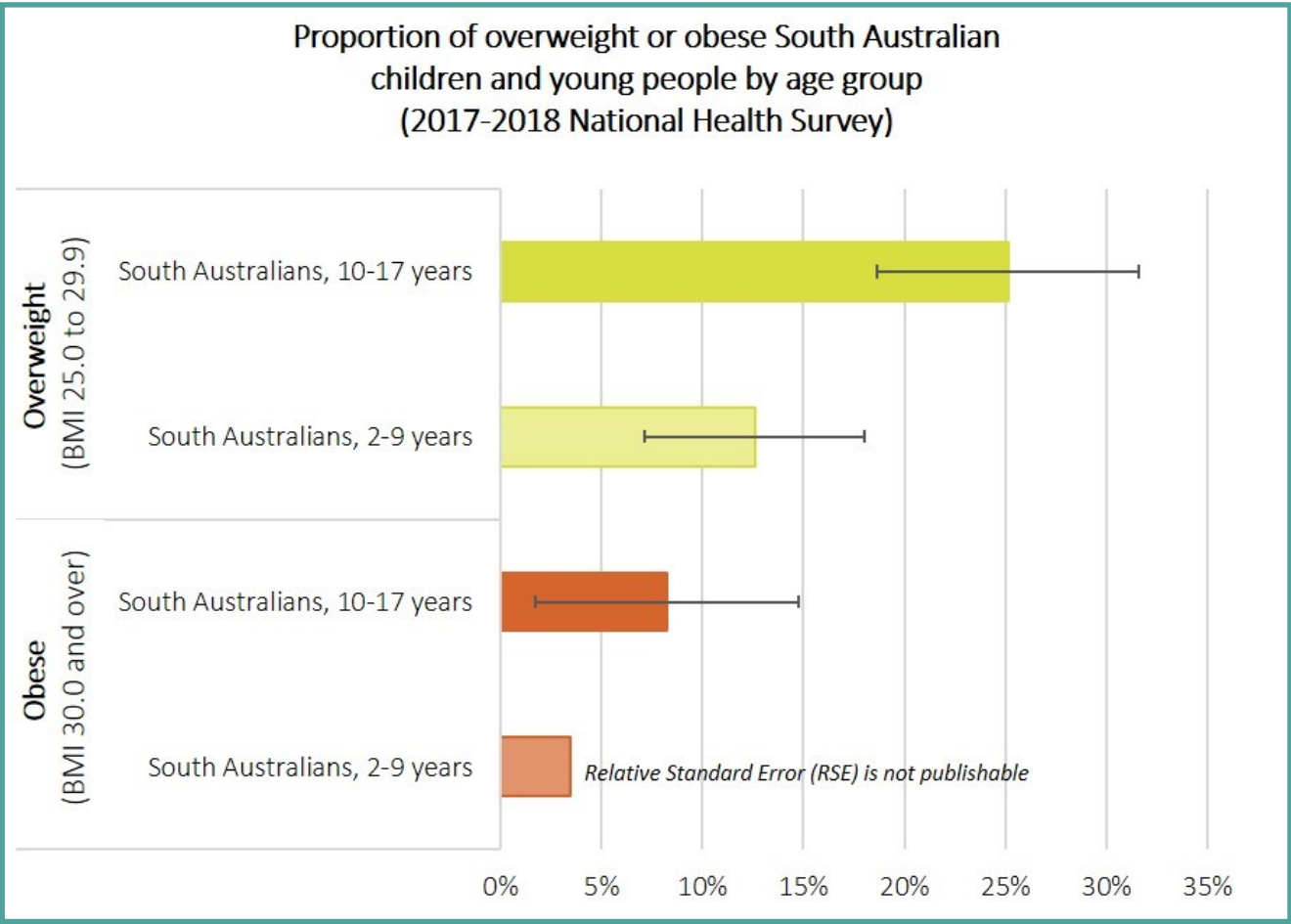


Figure 2 Proportion of overweight or obese children and young people (2-17 years) in South Australia by age group, from the 2017-2018 National Health Survey.^{9, 10}

Data limitations

South Australia’s overweight and obesity prevalence rates for children and young people (2-17 years) are estimated from Australia’s triennial National Health Survey conducted by the Australian Bureau of Statistics. Because these data are not captured annually, a significant measurement gap exists. Within South Australia, Wellbeing SA conducts a state-wide population health

survey that monitors the nutrition and activity patterns of children and young people through a telephone survey. Whilst these data are useful for tracking broad population trends, they are **insufficient to accurately measure** any regional/group patterns of growth/weight in children and young people.¹¹

The data are also **inadequate to evaluate the impact of specific prevention or intervention strategies** to reduce the occurrence of overweight and/or obesity in childhood, adolescence and adulthood. Regular, objectively measured growth and eating patterns of children and young people are needed.

A focus on prevention

Early nutrition influences infant growth and development eg, overnutrition in early infancy is associated with a risk of obesity and diabetes later.¹²

There is evidence that the obesity risk of children at 3 years of age is substantially lower for breastfed infants, when compared with formula-fed infants.

Other factors associated with being overweight in childhood include:

- low activity levels
- poor sleeping patterns
- adverse events
- stress in family life.

As children grow, they are also increasingly exposed to aggressive food marketing for easily accessible, relatively low-cost, nutrient-poor, energy-dense foods.

Interventions in early life for health problems, when biology is most amenable to change, are more likely to have a sustained effect on health.

Interventions that help parents and carers to introduce and/or establish positive eating habits with healthy foods may help to improve eating behaviour in young children, and reduce the chances of excessive weight gain.

Being overweight or obese is shaping young South Australians and South Australia for an unhealthy future.

Recommendations

- ***That improved data be collected in South Australia using random samples and objective physical measurements to inform evidence-based prevention and intervention strategies.***
- ***That data collection be tailored to provide longitudinal insights for the same group of children and young people from birth to adulthood, rather than unrelated snapshots of data taken periodically in childhood and again in adolescence.***

Notes and References

1. World Health Organization Fact sheet on Obesity and Overweight (<https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>), last accessed on 18 Jun 2021.
2. Australian Bureau of Statistics (2017-18) cat no. 4364.0.55.001 [National Health Survey: First Results, 2017-18-South Australia](#), Table 16.3, viewed 18 June 2021.
3. "Viewpoint article: Childhood obesity - looking back over 50 years to begin to look forward" by Matthew A Sabin et al JPCH 51, (2015) 82-86.
4. AIHW Source (National Hospital Morbidity Database), [Incidence of gestational diabetes in Australia \(Web report\)](#), last updated: 04 Sept 2019, Figure 3: Incidence of gestational diabetes, 2000-01 to 2016-17.
5. Children and young people aged 2-17 years refers to those with an age range from 2 years to less than 18 years of age.
6. Australian Bureau of Statistics (2014-15) cat no. 4364.0.55.001 [National Health Survey: First Results, 2014-15-South Australia](#), Table 16.3 and 16.4, viewed 18 June 2021.
7. Australian Bureau of Statistics (2017-18) cat no. 4364.0.55.001 [National Health Survey: First Results, 2017-18-South Australia](#), Table 16.3 and 16.4, viewed 18 June 2021.
8. Australian Bureau of Statistics (2017-18) cat no. 4364.0.55.001 [National Health Survey: First Results, 2017-18-South Australia](#), Table 16.1, viewed 18 June 2021.
9. Children 2-9 years refers to those with an age range from 2 years to less than 10 years of age. Similarly, young people 10-17 years refers to those with an age range from 10 years to less than 18 years of age.
10. Australian Bureau of Statistics (2017-18) cat no. 4364.0.55.001 [National Health Survey: First Results, 2017-18-South Australia](#), Table Builder viewed 18 June 2021.
11. The National Aboriginal and Torres Strait Islander Health Survey collects some information about Aboriginal and Torres Strait Islander children and young people.
12. National Scientific Council on the Developing Child (2020). Connecting the Brain to the Rest of the Body: Early Childhood Development and Lifelong Health are Deeply Intertwined: Working Paper No. 15. Retrieved from www.developingchild.harvard.edu.