4.4 Early Detection Guidelines

4.4.5 Overweight and obesity in primary school aged children

**Background**

Childhood obesity has been identified as one of the most serious public health challenges of the 21st century.\(^1\) Nationally, the prevalence of overweight and obese children aged 5-17 years increased from 21% in 1995 to 25% in 2007-08 and then remained relatively stable to 2011-12 (25.7%), with 17.7% overweight and 7.6% obese.\(^2\) Rates of obesity generally increase with age and the prevalence of overweight and obesity among adults continues to rise.\(^3\) Prevention and treatment interventions are most likely to be successful when implemented pre-puberty.\(^4\)

Obesity develops from a sustained positive energy imbalance and a variety of genetic, behavioural, cultural, environmental and economic factors. The interplay of these factors is complex and has been the focus of considerable research.\(^5\)

Childhood obesity has immediate and long term physical and psychosocial consequences. Physical consequences can include; obstructive sleep apnoea, fatty liver, indigestion and oesophagitis, orthopaedic problems, polycystic ovaries in adolescent females, type 2 diabetes; and cardiovascular disease risk factors including hypertension, dyslipidaemia, chronic inflammation, increased blood clotting tendency, endothelial dysfunction and hyperinsulinaemia.\(^5\) More immediate physical consequences include; heat intolerance, increased sweating, chafing skin, shortness of breath on exertion, and musculoskeletal discomfort which can all have a major impact on lifestyle and mental wellbeing.\(^5\)

Negative psychosocial effects of childhood obesity include depression, social isolation, poor social functioning, negative physical self-perceptions and increased risk of mental health problems in later life.\(^5\)

Obesity occurs across all demographics and sub-populations, however of particular risk in Australia are Aboriginal people, people from Pacific Islander and middle eastern/Arabic backgrounds, and to a lesser extent general social-economic disadvantage is a risk factor for obesity.\(^5\)

Among Aboriginal people, high body mass is the second highest contributor to disease burden after tobacco use. Overweight among young Aboriginal groups is even more concerning, as evidence suggests that the negative effects of overweight and obesity can occur at a relatively low BMI among Aboriginal children. High levels of early onset diabetes among Aboriginal women (in the child-bearing years) has also been shown to increase the risk of obesity and early onset type 2 diabetes in their children.\(^5\)

Prevention, early intervention and targeted intervention programs for overweight children all have enormous synergies in their content (dietary and physical activity improvements, coupled with behaviour change strategies), however increased intensity and duration of intervention is required as the severity of overweight increases. Quality parenting programs have been shown to have a positive role in obesity prevention and weight management for children. For children who are obese and require targeted weight management intervention, success is most likely gained...
from programs providing at least 25 hours of contact with the child and/or parent over a 6 month period.\textsuperscript{1, 6, 7}

The importance of quality parenting is paramount in helping children learn to self-regulate behaviour, and the value of this can’t be overestimated in the prevention of obesity. Parents can mediate the impact of the prevailing obesogenic environment on their own family environment as they have a powerful influence on their children’s eating and activity habits and level of body satisfaction.\textsuperscript{4}

School based obesity prevention programs are most successful among primary school aged children and have strategies that penetrate the curriculum, provide physical activity opportunities, improve quality food supply within school, provide staff development and include support and interaction with parents at home.\textsuperscript{4, 8} This comprehensive approach reflects the framework recommended within the Health Promoting Schools approach.

Obesity trends will not change noticeably until the aggregation of obesity control strategies is greater than the aggregation of obesogenic elements in modern society. In order to acknowledge the small positive changes made, good obesity prevention and intervention programs should focus on immediate outcomes such as changes in attitudes, knowledge, dietary patterns, or activity levels as early measures of success in obesity control.\textsuperscript{8} Intervention needs to be across many settings (school, health care, home and community) and through multiple mediums (education, social support, policy, systems, and environmental change) for an effective change in the prevalence of obesity in a population.\textsuperscript{9}

There is a far greater chance of success if intervention occurs pre-puberty, or before eating and physical activity behaviour patterns are fully formed.\textsuperscript{3} For this reason, the focus of identification of weight issues is recommended among primary school-aged, especially pre-pubertal, children.

Parents are poorly skilled at self identifying weight concerns in their own children as results from parent perception surveys\textsuperscript{3} highlight significant discord between parental perceptions of children’s weight status versus clinically robust population surveys.\textsuperscript{2} In 2014 the CHS 409 School Entry Health Assessment form was amended to directly ask parents if they would like their child’s weight and height measured to see if they are within a healthy weight range (rather than relying on parent’s perception of their child’s weight status). Sensitive communication is often required to overcome barriers parents may have when a weight concern is identified for their child.

**Staff are strongly encouraged to complete the related online training “Talking with parents about children’s weight” prior to undertaking weight assessments.** This can be be can be accessed at [www.talkingaboutweight.org](http://www.talkingaboutweight.org).

**General principles**

- Encourage parents to seek help early for overweight and obesity in their child, as behaviours are more easily adapted in younger children.
- Overweight and obesity are more difficult to address after puberty.
- Raise awareness in the school community that overweight is an issue and the Community Health Nurse can help. (See key messages.)
• Parents may fail to recognise the weight issue evident in their child. Changing norms in childhood weight have led to many parents now perceiving an overweight body status to be ‘normal’.

• The support and cooperation of parents/carers are essential when addressing overweight and obesity in children. If parents are not ready to acknowledge a problem, then the issue should not be pursued.

• In extreme situations where parents of severely obese children refuse to acknowledge the issue and will not attempt to make changes for the health benefit of the child, then staff are encouraged to discuss the issue with their manager and refer to Information Sheet 8: Child Obesity and Child Protection.

• Approaching parents/carers to discuss overweight and obesity can be challenging. The following points are useful to keep in mind:
  o Undertake training or refresh skills available through Department of Health endorsed online training Talking with parents about children's weight” available at www.talkingaboutweight.org.
  o Consider where the weight assessment is conducted. If the assessment is to be conducted as part of SEHA then consider collecting children in a way that does not highlight differences in children who are or are not receiving a growth assessment. When a growth assessment is being conducted in response to a targeted request, ensure privacy and confidentiality for the child and the family.
  o Maintain open and honest communication to gain the parent’s confidence.
  o Maximise the chances of a positive conversation by developing an understanding of the family situation.
  o Avoid using language and behaviour that is labelling or judgemental and focus on the positive aspects of healthy growth. Consider having conversations with the parent without the child in the room.

• As overweight and obesity are heavily stigmatised, children can be very sensitive about their body image and may make negative comparisons with their peers. Measuring height and weight in order to calculate BMI may accentuate these sensitivities if care is not taken. It is important that the process of identification of overweight or obesity is handled sensitively as to minimise any potential for harm.

• Terms such as ‘fat’ or ‘morbidly obese’ must be avoided as these terms label the child. Terms and ‘at risk of overweight’ may be more appropriate.

• Parents can view the identification of weight issues as a criticism of their parenting rather than a chance for their child to achieve a weight within the healthy weight range. In instances where the parent does not want to talk about the weight issue, it may be appropriate to raise a concern about the child’s weight-related behavioural issues such as inability to sit comfortably on the mat or chair, or an inability to participate in physical activities.

• Parents should be discouraged from putting children on weight gain/loss diets without first consulting a general practitioner or dietitian.
- Parents should be supported to focus on healthy behaviours for the whole family (good eating habits and daily physical activity). Successful long term weight management for children is most likely to be achieved in families who adopt healthier lifestyle habits as a family unit.

### Key messages to use in parent talks, staff meetings and school newsletters:

- 20% of Australian children are already overweight when they start school.
- It is often difficult to tell if a child is overweight because our ideas of ‘normal’ have shifted.
- Simple changes to physical activity and eating habits can help children and families.
- Making these changes early in childhood (before puberty) is much easier and more likely to be successful than in the teenage or adult years.
- With help, young children can ‘grow into their weight’ (rather than having to actually lose weight).
- Early intervention is likely to prevent many physical and psychological health problems.
- The Community Health Nurse can help families address health issues related to growth.

### Role of community health staff

**Health Promotion**

Schools are ideally placed to promote healthy eating and regular physical activity through the formal school curriculum, the school environment and via a variety of policies and practices. A health promoting school can positively influence knowledge, attitudes, skills and behaviour of all students, enhancing short term and long term health outcomes. Comprehensive strategies (including education, environmental changes and policy development) should be employed for maximum results. School Health staff may be able to assist the school in initiating and/or developing these whole school strategies to improve knowledge, skills and behaviour of school students and their families.

For more information about school health promotion activities in the field of healthy eating, physical activity, healthy lifestyles and body image refer to section 4.3 Health Promotion in Schools within the ‘Community Health Policy Procedures and Guidelines Manual’.

**Early Detection**

The National Health and Medical Research Council (which compiles evidence for screening programs) suggests that community health services have an important role to play in identifying children who are gaining weight too quickly. School Health staff have an important role to play in the early detection and primary care of individual students who may be overweight or obese. School health staff may be able to conduct a weight assessment, provide brief intervention where appropriate, give information, and provide referral, liaison and support for students and their parents/carers. Early detection with individual children is the focus of this document.
Documentation

For children in the healthy or ‘at risk or overweight’ (overweight) ranges:

- CHS409-2 Health Assessment Results for SEHA assessments or CHS 142 Referral to Community Health Nurse for targeted assessments

For children in ‘overweight’ (obese) or underweight weight ranges:

- CHS430A/B Weight Assessment Form (Girls and Boys) including BMI plotting chart and brief history questions (health service record)

The Body Mass Index (BMI), BMI-for-Age Percentiles and obesity risk factor information are used to identify children who may be overweight or obese.

The BMI is determined using height and weight measurements and a mathematical formula. Girls and boys differ in their body composition, as do children of different ages. A BMI score plotted on the BMI-for-Age Percentile charts (for boys or girls) is used as an initial assessment to identify children who may be overweight or obese.5

The BMI assessment is not a diagnostic tool but can reliably predict the need for further assessment and intervention. The assessment is easy to perform, easily replicated, non-invasive and reliable.

The BMI assessment should not be used in isolation. Lifestyle and family obesity risk factors should also be considered. These include; growth history, apparent parental weight status, and family and child eating and activity patterns. This information in combination with the BMI-for-Age Percentile weight category will indicate the need for further assessment and/or intervention.

Training on BMI assessment and chart plotting is included in the online training “Talking with parents about children’s weight” available via www.talkingaboutweight.org.

Refer to 6.1.3 Conducting a Weight Assessment in the Community Health: Policy Procedures and Guidelines Manual.

A SEHA weight assessment is offered if:

- The parent/carer accepts the offer of a weight assessment within the School Entry Health Assessment Form: CHS 409. Priority should be given to children whose parents have additionally expressed a concern about their child’s weight within the CHS409.

A targeted weight assessment is offered if:

- A concern is raised by the parent/carer at any other time;
- A concern is raised (or referral is made) by the teacher at any time;
- A concern is raised by the student; and/or
- The professional judgement of the community health staff suggests cause for concern (i.e. visible discrepancy in body size for age and height).

IMPORTANT: Parental engagement and consent is critical to the success of any intervention. Consent is included in the CHS409 if the parent ticks yes to a growth assessment, however separate consent will need to be obtained for growth
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assessments triggered by teacher/student/nurse concerns. If there is no parental engagement in these circumstances, weight assessment should not be conducted.

Follow-up
Depending on availability, School Health staff may refer families to:

- General Practitioner
- Dietician, Paediatrician, Physiotherapist, Occupational Therapist, Clinical Psychologist
- healthy lifestyle programs or activities
- positive parenting programs
- community support services
- child/family weight management programs (where available)
- adult weight management programs (for parents with weight concerns).

Depending on individual workload and capacity, School Health Service staff may also offer healthy lifestyle brief intervention counselling to families to facilitate change.

Related professional development

- “Talking with parents about children's weight” available via [www.talkingaboutweight.org](http://www.talkingaboutweight.org) (staff are highly encouraged to complete this training)
- Motivational Interviewing
- Opportunistic guest speakers/workshops/ readings related to obesity/ interventions/ cultural considerations/ health promoting schools/ healthy eating/ physical activity etc.

Related policies, procedures and guidelines

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Other

- Operational Circular – OP 2050/06 Confidentiality and Divulging Patient Information to Third Parties, Department of Health WA
- Operational Circular – OP 1548/02 New Western Australian Public Sector Code of Ethics, Department of Health WA
- Early Detection Sub-policy for WA School Health Services. CH 002-2.
Useful resources

- [http://www.talkingaboutweight.org/](http://www.talkingaboutweight.org/) online training package for health professionals working with children and families to assist them to talk sensitively about child weight concerns. The training covers:
  - The causes and consequences of child overweight and obesity
  - How to accurately define and measure obesity in childhood
  - How to explain weight status in a way that is sensitive, non-judgemental and promotes lifestyle change

- Refer to Procedure document ‘6.1.3.6 Conducting a weight assessment – school aged children’ for comprehensive list of supporting resources.

References


