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Treatment options

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The prevalence of child and adolescent overweight and obesity is rapidly increasing and is associated with morbidity, both medical and psychosocial. Obesity is unlikely to resolve spontaneously. It is important that health professionals can assess obesity and initiate an action plan. The evidence base for what works best in the management of child and adolescent overweight and obesity is limited. It is uncertain whether protocols from clinical research trials can be translated into primary care. Dietary change, with an emphasis on lower fat intake and smaller portion size, should be commenced. There should be an increase in physical activity and a decrease in sedentary behaviours, combined with behavioural change and parental involvement. These are the elements of a lifestyle intervention. In the severely obese adolescent with obesity-related co-morbidity, the use of very low-energy diets and anti-obesity agents could be considered. Bariatric surgery may be indicated in carefully selected, older, severely obese adolescents.

Key words: child; adolescent; obesity; overweight; treatment; diet; exercise; parents; lifestyle; behaviour.

THE EXTENT OF THE PROBLEM NECESSITATES AN ACTIVE APPROACH

In the last decade or so the prevalence of child and adolescent overweight and obesity has increased dramatically in Western countries, together with countries in economic transition to Westernised lifestyles.[1] The increase in prevalence has occurred against a background of increased knowledge and research publications about obesity[2] and increasing exposure of the topic in the lay press. In the enthusiasm to prevent the condition, it is important not to neglect those children and adolescents in whom it is established.

Overweight and obesity are two of the most common chronic childhood conditions. Unlike many other chronic childhood conditions (e.g. asthma), overweight and obesity are primarily treated by lifestyle modification, are often refractory to

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therapy, are prone to relapse after treatment, and are stigmatized by many, including health professionals.[3]

WHY TREAT CHILDHOOD OBESITY?

There are a number of compelling reasons to intervene in child and adolescent overweight and obesity.

- An overweight child or adolescent is likely to become an obese adult unless there is active intervention. Tracking studies are in general agreement that body weight tracks from childhood through to adulthood; what varies between studies is how strongly weight tracks and from what age prediction is accurate.[4,5] The predictive power of body weight increases with age, so that over 50% of obese adolescents become obese adults. It can never be assumed that obesity will spontaneously resolve.
- Cardiovascular risk factors track at higher levels in obese children and adolescents and could be expected to improve with weight management.
- Obesity in childhood and adolescence increases the risk of adult cardiovascular disease morbidity and mortality.[6,7]
- Obese children and adolescents already have established physical and psychosocial morbidity as a result of their obesity (Table 1).
- There is evidence from two research groups that children maintain their relative weight loss over time, and that children are better able to maintain weight loss than adults.[8,9]

Table 1. Medical and psychosocial consequences of obesity.

Medical
Minor but distressing
Tiredness
Shortness of breath
Chafing
Heat rashes, skin irritation and infection
Flat feet and susceptibility to soft tissue injury
Significant
Elevated cardiovascular risk factors and endothelial dysfunction
Insulin resistance, impaired glucose tolerance, T2DM
Hypertension
Hepatic steatosis and gastro-oesophageal reflux
Obstructive sleep apnoea and asthma
Polycystic ovaries
Slipped femoral capital epiphyses
Psychosocial—the most common consequence
Lowered self esteem
Social isolation
Depression