HEALTHY EATING ADVICE FOR CHILDREN

Breast milk is the food of choice for newborn infants as it offers significant health benefits for babies, for example reduced risk of respiratory, gastrointestinal, urinary tract and ear infections, allergy and asthma. Weaning should be avoided until infants are at least four to six months of age and is best done gradually, starting with small amounts of pureed fruit or vegetables, or rice or other gluten free cereal.

From six months the range of foods offered should be gradually increased. To ensure children up to the age of two consume adequate energy for growth and development in relatively small volumes of food, full fat versions of dairy products are recommended and starchy foods very high in fibre should be avoided. Children from approximately one year would normally be expected to eat three meals a day and two between-meal snacks.

From two years gradual introduction of low fat dairy products should be considered for children who are growing well and eating a varied diet.

By the age of five most children should be eating in accordance with the 'Eating for Health' plate model.

This Quick Reference Guide provides a summary of the main recommendations in the SIGN guideline on the management of obesity in children and young people.

Details of the supporting evidence and the full guideline are available on the SIGN website

This guideline was issued in 2003 and will be considered for review in 2006.

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Quick Reference Guide

Management of obesity in children and young people

Key messages

- **Obesity in children is becoming more common.**
- **Obesity is a health concern in itself and also increases the risk of other serious health problems such as high blood pressure, diabetes and psychological distress.**

Diagnosing obesity

C	**The Body Mass Index percentile should be used to identify childhood obesity.**

$$\text{BMI} = \frac{\text{weight in kilogrammes}}{\text{height in metres}^2}$$

D	**Obese children have a BMI ≥98th centile**
☑	Overweight children have a BMI ≥91st centile

of the UK 1990 reference charts for age and sex

Which are recommended for clinical and epidemiological practice in the UK and are available in the main guideline

Treating obesity

D	**In most obese children weight maintenance is an acceptable goal.**

TREATMENT

☑ Increases in activity, through lifestyle changes and exercise, reduction in energy intake and reduction in sedentary behaviour should be considered for the treatment of obesity

D **Treatment should only be considered where:**

- **a child is defined obese** *(BMI ≥98th centile)*
- *and* **the child and family are perceived to be ready and willing to make the necessary lifestyle changes**

WEIGHT MAINTENANCE

D **In most obese children** *(BMI ≥98th centile)* **weight maintenance is an acceptable goal.**

☑ The benefits of weight maintenance should be demonstrated to families by charting weight over time on the BMI percentile chart.

D **Weight maintenance and/or weight loss can only be achieved by sustained behavioural changes, eg:**

- **healthier eating**
- **increasing habitual physical activity** *(eg brisk walking)* **to a minimum of 30 minutes/day. In healthy children, 60 minutes of moderate-vigorous physical activity/day has been recommended**
- **reducing physical inactivity** *(eg watching television and playing computer games)* **to < 2 hours/day on average or the equivalent of 14 hours/week**

Practitioners may be asked to give advice on managing overweight children. As with obese children, weight maintenance is an acceptable goal for children who are overweight.

D **In overweight children** *(BMI ≥91st centile)* **weight maintenance is an acceptable goal. Annual monitoring of BMI percentile may be appropriate to help reinforce weight maintenance and reduce the risk of children becoming obese**

WHEN TO REFER

D **The following groups should be referred to hospital or community paediatric consultants before treatment is considered:**

- **children who may have serious obesity-related morbidity that requires weight loss** *(eg benign intracranial hypertension, sleep apnoea, obesity hypoventilation syndrome, orthopaedic problems and psychological morbidity)*
- **children with a suspected underlying medical** *(eg endocrine)* **cause of obesity including all children under 24 months of age who are severely obese** *(BMI ≥99.6th centile)*
- **all children with BMI ≥99.6th centile** *(who may have obesity-related morbidity)*

☑ Suspect an underlying medical cause of obesity if a child is obese and also short for their age

IMPACT ON THE CHILD

☑ Healthcare professionals should be aware that the following risk factors for coronary artery disease and atherosclerosis are relatively common in obese children and adolescents:

- increased blood pressure
- adverse lipid profiles
- changes in left ventricular mass
- hyperinsulinaemia

☑ Obese children showing signs of distress and their families should be considered for referral for psychological assessment and treatment

POTENTIAL IMPACT ON THE ADULT

C

- **Prevention and treatment of obesity should be initiated in childhood.**
- **Parental obesity should be recognised as a risk factor for childhood obesity to persist into adulthood**

KEY MESSAGES FOR PATIENTS & PARENTS

- **Obesity in children is becoming more common.**
- **Obesity is due to an imbalance between energy consumption and energy expenditure. Obese children do not have low energy needs. They have high energy needs to support their high body weight.**
- **Obesity is a health concern in itself and also increases the risk of other serious health problems such as high blood pressure, diabetes and psychological distress.**
- **An obese child tends to become an obese adult.**
- **There is no evidence that any drug treatment is effective in treating obesity in children.**
- **Obesity in children may be prevented and treated by: increasing physical activity/decreasing physical inactivity, (eg TV watching) and encouraging a well balanced and healthy diet.**
- **Lifestyle change involves making small gradual changes to behaviour.**
- **Family support is necessary for treatment to succeed.**
- **Generally, the aim of treatment is to help children maintain their weight (so they can "grow in to it").**
- **A medical cause of obesity is more likely in the child who is obese and short.**
- **Most children are not obese because of an underlying medical problem but as a result of their lifestyle.**

The recommendations are graded A B C D to indicate the strength of the supporting evidence.

Good practice points ☑ are provided where the guideline development group wishes to highlight specific aspects of accepted clinical practice.