



British Society for Paediatric Endocrinology and Diabetes

OVERWEIGHT

This is an extremely common, and increasing, problem in all age groups in western society. Some of the reasons are not clear but the main factors are the increased energy (calorie) content of our diet and the tendency to be less active. Although these factors affect us all there are also very strong and as yet poorly understood genetic factors which account for the fact that excessive weight is very strongly associated in some families.

Causes:

Fat is only laid down, and weight gained, when the energy intake of an individual exceeds the energy expenditure. During the years of childhood a large amount of energy is consumed on the process of growth but once growth is complete only the energy needed for basal metabolism and that expended through exercise is needed to maintain a steady weight. It is in fact remarkable that most people retain a relatively stable weight throughout their adult life with only a slight tendency to gain with age. It is not yet understood how this is regulated but exciting new discoveries, particularly a chemical secreted into the blood by fat cells, leptin, which helps to regulate appetite are beginning to clarify the mechanisms. The very great majority of children who are overweight have no underlying disease process. There are some unusual diseases in childhood associated with increased weight, these include underactivity of the thyroid gland, overactivity of the adrenal gland and certain congenital syndromes associated with excessive appetite. Simple tests may be necessary to exclude these conditions.

Effects:

Especially in childhood, there are very few health implications of overweight until this becomes extreme. Naturally overweight children tend to exert themselves somewhat less than their thin peers and this tends to increase the problem. However, it is the cosmetic appearance of overweight which causes concern and is considered highly undesirable, and even in some way blameworthy in our society. Overweight children tend strongly to become overweight adults but once again the reported risks of obesity, such as heart disease and joint problems, are only relevant to extremes of overweight.

Management:

For all overweight children consideration must be given to energy expenditure and to diet. Nearly all children enjoy some form of physical exercise and can be encouraged to increase their level of exertion. Unfortunately, overweight children are naturally often reluctant to take part in some sport which may leave them open to teasing but most like others such as swimming. The well publicised fact that exercise uses up only a relatively small number of calories should not discourage this approach because there are longer term effects on weight of exercise. The aim of all reducing diets is to limit calorie intake but this is difficult to do as indicated by the fact



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that 30% of adult women are attempting to lose weight at any time! It is important to recognise that the calorie content of fat, which is 10 calories/gm, is a great deal higher than that of sugary foods which is only 5 calories/gm. Much most effective way to limit calorie intake, therefore, is to reduce the fat content of the diet. Nearly all foods now have the contents on the packaging and one way to limit the fat intake is to avoid all foods which contain more than 5gm fat/100gms. Another useful fact to remember is that after eating there is a period of about 20 minutes before the feeling of hunger ceases. If your child has to have a snack, therefore, try to restrain any further intake for 20 minutes when the problem may be forgotten! An outline diet suitable for children is specified on the sheet herewith.

Unfortunately, there is no safe form of medical treatment yet available for overweight. A wide variety of stimulant drugs have been used and do temporarily reduce the appetite. Unfortunately these soon lose their effect and tend to be strongly addictive, they are not suitable for children. New forms of treatment are investigation but not yet available.

Outlook:

It is most important to set realistic goals in relation to childrens weight. To maintain a weight significantly lower than that genetically appropriate for the child will be a continual battle. Indeed, it may not be appropriate to attempt more than to limit the small fraction of overweight due to a high calorie diet and lack of exercise. It is probably more constructive to help the child come to terms with the fact that they are built on generous lines. There is some evidence to support the often stated fact that overweight people are more cheerful than their skinny but gloomy peers! Concerns about the health effects of overweight are not justified by the medical evidence.