Excess weight in childhood and adolescence: prevention and treatment

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Consequently, prevention and treatment of childhood obesity is a public health priority. What is the current information on the methods and the results?

In theory, prevention and treatment of any excess weight is easy. If the energy intake of the body is less than the output, then the weight falls; if input is greater, then body weight increases. Easy in theory, but hard in practice partly because:

- over thousands of years the human genes have favoured those who have stored fat in times of plenty, to help survival in times of food shortage;
- in developed countries there is a superfluity of attractive energy-dense foods (i.e. a change in food habits);
- there is now little need, or encouragement, to expend energy and great attraction in sedentary recreational pursuits (i.e. a change in lifestyle).

While it is widely accepted that prevention of childhood obesity is a public health priority, there is a poor understanding of how this can best be achieved. Analyses of the currently available prevention and treatment strategies have recently been undertaken by several researchers2-5. Most programmes used either a school-based or a family-based approach.

School-based programmes have been oriented towards prevention, targeting all students in selected classes to avoid stigmatisation of children with obesity. These programmes include not only health promotion initiatives alone and physical activity alone, but also multifaceted interventions. These involved:

- classroom-based programmes to encourage healthy eating and greater levels of physical games,
- practical demonstration of the principles by changing school meals to more healthy patterns with reduced fat content and higher intake of vegetables and fruit,
- school action plans to increase the amount of time spent on physical activity within the school day.

These school-based initiatives, by their very nature, rely for their success upon the enthusiasm of the teaching staff, coupled with adequate training of these staff members in the principles and practice of sustaining a healthy lifestyle.

Family-based programmes. As the name implies, the emphasis here is placed firmly on the family unit, in the belief that unless the family as a whole can be encouraged to adopt a healthier lifestyle, children are not likely to continue with any improved behaviour. The majority of these studies involved, directly or indirectly, either health or social welfare professionals to provide the necessary stimulus and competence. The aim was to modify behaviour within the whole family to ensure that a healthy lifestyle persisted long after the active period was complete.

Both family-based and school-based approaches benefit from exemplary stories or role models.

Challenge to current approaches

To date, school-based intervention programmes have generally failed to reduce the prevalence of obesity. In a few family therapy studies, favourable changes in long-term weight loss were seen, but only in motivated individuals. One possible explanation of why long-term weight loss is so difficult to achieve is that the dietary and physical activity prescription used in both family-based and school-based programmes might not be particularly effective. A second possibility is that environmental factors (e.g. increase in sedentary pursuits including television, video games, computers; deficit of urban and suburban environments that encourage active lifestyles, such as sidewalks and bike paths; increase in eating away from the home, and increased portion sizes) significantly tip the balance towards weight gain.

Is there any purpose in continuing studies of this type?

The answer should be a resounding 'YES'. What may also be worth further study is a combination of school and home encouragement of a more multifaceted approach to a healthy lifestyle. At the very least, it is worth further serious trials.

References

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