Childhood obesity: time to wake up to the facts

The first step in tackling obesity is acknowledging that a weight problem exists and understanding its associated effects on a child’s health, writes Bróna Mooney.

Childhood obesity has become an alarming national health concern in recent years. One in five Irish children is considered to be obese with levels of obesity reaching epidemic proportions in recent years. More than 300,000 Irish children are now considered obese and this figure is estimated to increase by 10,000 annually. In 2010, the number of children overweight was estimated to be greater than 42 million worldwide.

A four-year study on the eating and exercise habits of 8,500 nine-year-olds carried out by the Department of Health raised many concerns. This found 19% of Irish children were overweight at age nine, with 26% outside the healthy range for their age. Girls were found to have higher rates of weight problems with 22% considered overweight compared to 19% of boys. Similarly, obesity levels were 8% for girls compared to 5% for boys.

This concerning trend was also noted in three-year-olds with 19% considered overweight and 6% deemed to be obese. Body mass index (BMI) is the formula used to screen for obesity and ascertain the weight-to-height relationship. A child with a BMI at or above the 95th percentile on the UK 90 centile chart is recognised as obese or overweight, while those between the 85th and 95th percentile are considered at risk.

Alarming statistics reported by the National Dairy Council suggest that a third of Irish parents of obese teenagers and three-quarters of parents of overweight teenagers think that their child’s weight is ‘fine’. Parents who reported recognising that a problem existed found it difficult to address and lacked sufficient support and guidance on how to improve their child’s weight problems.

**Risks and consequences**

An unhealthy diet, lack of exercise and socioeconomic background all play a role in Irish childhood obesity levels. As a rule, obese children become obese adults. This is a cause for concern when future health implications for the individual are taken into consideration. Also worrying is the future financial burden that this will have on the Irish health service, which is estimated to be €0.4 billion a year.

Children who are obese between six months and five years of age have a 25% chance of becoming obese adults. Over the age of six years, this likelihood increases to 50% and obese adolescents are 80% more likely to develop obesity in adulthood.

Obesity is the precursor to type 2 diabetes, hypertension and cardiovascular disease and is also a major contributor to negative self-image and associated psychosocial issues. Concerning statistics suggest that obesity accounts for 5% of heart attacks and stroke, 10% of osteoarthritis, 20% of hypertension, 30% of all cancers and 80% of type 2 diabetes.

Teenagers entering adulthood with a BMI of 40 or more will have their life expectancy reduced by up to 13% for males and 8% for females. There has been a significant increase in teenage obesity in Ireland since 1990, with an eight-fold increase in males (from 1% to 8%) and a two-fold increase in females (from 3% to 6%). One in five Irish teenagers is considered overweight or obese (11% overweight and 8% obese).

**Diet and physical activity**

Balanced nutrition and the promotion of healthier eating habits is key to tackling the problem of overweight, rather than just focusing on weight loss. The National Children’s Food Survey reported that many Irish children between five and 12 years have inadequate intakes of calcium, iron, folate and vitamins A and D. An estimate of 25.5% of their daily calorie intake is supplied by biscuits, sugars, fats and desserts. Specifically, this survey found that, at least once a day: 51% of Irish children consumed sweets; 37% drank fizzy drinks; 27% consumed crisps; 12% ate chips; and 7% ate hamburgers. Furthermore, 42% of teenage girls do not meet their calcium requirements and 80% have inadequate fibre intake.

Children and teenagers are particularly at risk as their bodies demand calcium for the high level of bone growth that occurs during developmental years. An adequate dietary intake of iron is required to maintain children’s energy levels and to strengthen their immune systems. Almost three-quarters (74%) of Irish teenage girls and 19% of boys do not get enough iron in their diets. This leads to impaired concentration, mood and physical performance. Poor food choices can be made when an individual is tired or stressed; they are more likely to opt for sugary drinks or snacks to give them a quick energy boost.

In recent years, eating habits of Irish people have changed, including what is eaten and the frequency and quantity of food eaten. Hectic lifestyles are attributed to the increase in consumption of convenience foods. The preparation of homemade, nutritious foods is frequently being replaced with convenient foods that are high in fat, calories and sugar. Portion sizes have also increased with ‘super-size’ options commonplace in many food chain stores.

Physical activity is an important determinant of body weight. The increase in the prevalence of obesity can be partly attributed to the total energy consumed through foods, combined with levels of physical activity which are simply too low. Achieving and maintaining a healthy body weight throughout life means balancing energy intakes from all food sources with physical activities that use up energy. It is now widely accepted that children should...
be involved in at least 60 minutes per day of moderate physical activity in order to avert excess weight gain.9

Physical inactivity is a serious concern because habits established in childhood may continue into adulthood. Inactivity in sports outside school hours, television viewing, playing video games and using social media for long periods are attributed to increased weight gain in children and adolescents.9

The use of social networking websites by young people in Ireland has increased by 69% since 2007 – 21% of nine to 12-year-olds and 47% of 13-16-year-olds have social networking accounts, with 72% accessing their accounts more than three times a week and 37% on a daily basis. More than half (51%) of girls are reportedly spending more than an hour a day during the week on social networking.11,12 A study of Irish 15-17 years old identified that obese adolescents were twice as likely to have a high incidence of sedentary leisure habits compared to normal or overweight teenagers. Increased waist circumference was also found to correlate with those who spent more time watching television.7

Childhood and adolescent obesity also has major implications on long-term mental health risks. Obese children frequently suffer from self-blame, negative body image and depression related to societal stigmatisation. They frequently experience rejection by their peers and as a result suffer low self-esteem which can impair academic and social functioning.13

Targeting and preventing childhood obesity

As educators and health promoters, nurses and midwives play a key role in the prevention of childhood obesity. Opportunities to educate children and parents exist in hospitals, child care centres, GP surgeries, health fairs and through community initiatives. Nurses and midwives are frequently in the position to identify children who are at risk of becoming overweight or obese and can promote the importance of good nutrition, regular eating patterns and active healthy lifestyles.

Nurses can encourage parents to consider childhood eating habits, types of food available at home, attitudes towards food and to identify if certain foods are used as rewards. Parents need to be encouraged to act as role models. Numerous studies indicate that if one parent is obese, a child is three times more likely to become obese than a child who has parents of normal weight. If both parents are obese, the risk increases ten-fold.12

Parents must be encouraged to strive to obtain better nutritional balance rather than counting calories as an effective approach to weight loss, and also to achieve healthy balanced family diets. Small changes can be significant, such as: limiting snacking; including fruit and vegetables at each meal; replacing confectionary with healthy options such as fruit and yogurts; and reducing refined cereals and white bread and replacing them with high fibre options such as wholegrains, which are better sources of slow release energy foods. In addition, parents can ensure that children drink six to eight cups of water and one to two glasses of low-fat milk per day, as recommended.16

Role of government and health services

The Department of Health has an important role to play in overseeing the delivery of health services. It is important that healthy lifestyles are supported and encouraged starting in the early years of life and continuing throughout an individual’s life span. Public health systems which monitor and support children and families in the three years after discharge from maternity services and through the primary schools system within immunisation schemes are in place. Therefore, all encounters with health services should be used as opportunities to promote and encourage healthy eating and active living. Prevention of childhood obesity is also essential in early years of life to ensure that children and adolescents can be supported in making healthy diet and lifestyle choices.

The majority of children are in school for the first two decades of their life, so opportunity exists to provide health education and promotion. The World Health Organisation considers monitoring and surveillance essential tools in the implementation of national strategies for healthy diets and physical activity.11

There is a need for long-term and continuous monitoring of the risk factors, including overweight and obesity, as this information can provide the bedrock of analysis of changes in prevalence, which can influence and direct government health policies and strategies. Trends in overweight and obesity in children need to be closely monitored and evaluated for effectiveness because of their public health importance and influence on future programmes and policies to address and manage overweight and obesity in Irish children and adolescence.13

Managing weight loss is not difficult – the basic rules still apply and include:

- Increasing the intake of fibre rich foods, fruit and vegetables
- Lowering fat and salt intake
- Increasing physical activity.

Halting the rise in levels of Irish childhood obesity presents a challenge to all stakeholders. The first step in tackling obesity is acknowledging that a weight problem exists and understanding its associated effects on a child’s health. Modest weight loss can have substantial benefits to children who are overweight or obese. Simple measures such as focusing on balanced nutrition rather than counting calories can be effective. It is important that nurses offer support and guidance to families in helping them to start making positive changes for the future.

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References

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