Combating obesity in children

The rate at which Irish children are becoming obese demands an urgent response to address the inevitable devastating health problems.

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Childhood obesity is one of the most serious public health challenges of the 21st century. The problem is global and is steadily affecting many low- and middle-income countries, particularly in urban settings. The prevalence has increased at an alarming rate. Globally, in 2010 the number of overweight children under the age of five is estimated to be over 42 million.1

Childhood obesity is on the rise with an alarming 300,000 Irish children either obese or overweight.2 This number is expected to grow by 10,000 every year.2 Results from the 19th annual meeting of the European Childhood Obesity Group, the largest childhood obesity conference ever to take place in Ireland revealed that Ireland has one of the highest rates of childhood obesity in the world, with one in 10 children aged between five and 12 in Ireland being classed as obese.3 The rate at which Irish children are becoming obese demands an urgent response to address the devastating health problems.

Body mass index, a formula that expresses the relationship of weight-to-height, is used to screen for risk of obesity. Children with a BMI at or above the 95th percentile on the UK 90 centile chart are recognised as obese or overweight, while children with a BMI between the 85th and 95th percentile are at risk.4

Mental health

Childhood obesity is not merely an aesthetic issue; it has major implications on long-term physical and mental health risks.2 Excess weight significantly increases children’s risk factors for a range of health problems both in childhood and adult life, including diabetes, heart disease, asthma, hypertension, sleep apnoea, osteoarthritis, bone and joint disorders, cancer, dyslipidemia, liver and gallbladder disease, menstrual abnormalities among others.2,5,6 On an emotional level, “obese children can suffer self-blame, negative body image and depression related to societal stigmatisation of obesity”.6 “Obese children can experience rejection by their peers and as a result suffer low self-esteem impairing academic and social functioning”.6

Obesity in childhood has a tendency to persist into adulthood.6 Children who are obese between six months and five years of age have a 25% chance of becoming obese adults. If they are obese when they are over six this increases to 50% and obese adolescents are 80% more likely to become obese adults.7 Obesity accounts for 5% of heart attacks and stroke, 10% of osteoarthritis, 20% of hypertension, 30% of cancers and 80% of type 2 diabetes.7 Based on these shocking statistics, childhood obesity is not an issue which should be taken lightly.
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It is estimated that from 1990 to 2005, overweight and obesity in children has increased 2-4 fold.\(^8\)

**Reasons for epidemic**
Research has identified genetic, environmental, and societal factors that place children at risk for obesity.\(^6\)

One major issue surrounding the rise in childhood obesity appears to be parental denial. According to recent studies, a large number of Irish mothers whose children were overweight or obese did not consider their child’s weight to be an issue. Of the parents who did recognise that their child was overweight or obese, it was found that they did not tackle the issue as they considered it too difficult.\(^2\) In other words parents of overweight children are either oblivious to the problem or lacking sufficient information, support and guidance on how to improve the situation.\(^2\)

Another way in which parents are contributing to the childhood obesity epidemic is parental obesity.\(^6\) Various studies have indicated 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.\(^6\) If both parents are obese the risk increases 10-fold. “The correlation between parent and child obesity is attributed to environmental and societal factors to which all members of the family are exposed.”\(^6\)

**Processed foods**
With regards nutrition, Ireland has seen a dramatic change in eating habits including what is eaten, where it is eaten, frequency and quantity of food eaten.\(^2\) Our hectic lifestyles no longer encourage the preparation and consumption of homemade, nutritious food. Instead we are living in an environment that promotes the consumption of processed foods high in fat and sugar that are laden with calories. This convenience food culture means we are becoming more reliant on quick and convenient foods that fit into our ever hectic lifestyles.\(^2\)

At the same time opportunities for physical activity are decreasing as we become more reliant on cars for transport as opposed to cycling or walking leading to an overall reduction in physical activity.\(^3\) Coupled with this, children are exposed to sedentary behaviours such as video games, computers and hours watching TV as means of recreation. The result is a generation of children who are over-consuming calories while simultaneously leading a more sedentary lifestyle turning to visual media for the stimulation that earlier generations derived from physical activities such as football and other outdoor activities.\(^2\)

This combination of super-sized food portions and highly processed convenient foods has transformed western societies into “obesigenic environments”.\(^6\)

**How do we combat obesity**

To date, obesity treatment programmes have achieved only moderate success and the increasing prevalence of the condition has facilitated a shift toward preventive interventions,\(^6\) therefore the focus should be on prevention and early intervention of childhood obesity.

Acknowledging a weight problem and understanding its health consequences are essential first steps in tackling obesity.\(^9\)

Encouraging healthy eating and activity at home are the next steps. This will require educating parents on good nutrition suitable for the entire family so that they can put it into action. The focus should be on educating parents on what a balanced diet consists of. Making the focus about healthier eating habits instead of just about weight loss makes it easier for the family as a whole to make the necessary changes.\(^7\) Often diets that are high in sugar, salt and fatty foods are low in essential vitamins and minerals and the intake of these types of foods displaces good nutritious foods.\(^7\) The National Children’s Food Survey highlighted that Irish kids are getting the balance wrong. Many Irish children aged between 5 and 12 years have inadequate intakes of calcium, iron, folate and vitamins A and D. On the other hand, an estimated 25.5% of their calorie intake is supplied by biscuits, cakes, confectionary, sugars, fats and desserts everyday.\(^7\) Such deficiencies as these can be easily rectified by improved dietary choices at home.

**Parents need to consider:**

- The types of foods that they have available at home
- The structure of mealtimes
- Their own dietary and lifestyle habits – are they good role models?
- How can they best encourage their child to make positive changes to their eating habits without allowing food to become a contentious issue
- Attitude towards food – are certain foods used as rewards, do children have access to high fat/high sugar snacks?

Focusing on incorporating healthier food into the diet in order to achieve a more balance diet can be a better angle to combat childhood obesity rather than trying to eliminate all ‘junk’ food from the diet.\(^2\) Often just getting a better nutritional balance can result in a natural tendency to eat less high fat foods. Focusing on balanced nutrition without focusing too much on counting calories can be an effective weight loss solution for families.\(^7\)

Offering simple guidelines like those listed below can help families start making positive changes without feeling they have to change their entire lifestyles:

1. Base your child’s diet on the healthy eating guidelines.
2. Include fruit or vegetables at each meal – include a variety of colours and types. Often children are hesitant to try different fruit or vegetables. It is important not to give up at the first hurdle and continue to encourage them to try a variety. Some child friendly vegetables include grated carrot, lettuce and peppers.
3. Limit snacking – snacks should consist of fruit, yoghurt, chopped vegetables, etc.
4. Limit confectionary in diet such as biscuits, cakes and buns
5. Include wholegrains – cut out white breads and refined cereals and start choosing high fibre options for the whole family. This will increase fibre in the diet and promote the intake of slow release energy foods at mealtimes.
6. Water – encourage water as a drink, recommended 6-8 cups per day. We often mistake thirst for hunger and not drinking enough fluid in the day can effect concentration too. Using sugar free squash can be a good way of encouraging children to drink more water. Encourage 1 glass of juice per day, water and 1-2 glasses of low fat milk.\(^7\)
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References

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Role of the Practice Nurse

Nurses play a key role in the prevention of childhood obesity. At an early level nurses can identify children at risk of becoming overweight or obese. Lifestyle advice and preventive measures can be suggested in a bid to reduce the prevalence of childhood obesity and related health complications.

As educators and health promoters, nurses have a responsibility to educate families about childhood obesity. Parents and children need to be taught about proper nutrition and the need for physical activity as well as the potentially harmful effects of sedentary activities. Offering parents some general guidelines on good nutrition and benefits of exercise can provide support and inspiration to parents to put a plan into action. “Children’s eating habits are not only impacted by the food choices available to them, but also by children’s tendencies to emulate their parents eating habits. To nurses this means educating parents regarding nutritional needs for themselves and their children.”

Education opportunities exist in a variety of settings. Children’s healthcare appointments, community organisations, health fairs and childcare centres all provide for educational opportunities.

By taking preventive steps to educate families of the importance of good nutrition, a regular eating pattern, an active, healthy lifestyle, and reduction in sedentary behaviours, childhood obesity can be curbed.

Tackling childhood obesity is vital for the future health of our country and the rest of the world. The Foresight report concludes “that unless sustained efforts are made to treat childhood obesity, the number of children who are either overweight or obese could rise as high as 50% by 2050.” As professionals we all have a role to play in the fight against childhood obesity. We must continue to play our role in maintaining the principles of healthy eating and exercise for our children if success is to be achieved.

7. Daily activity. Encourage daily activity. Children should be aiming for 60 minutes per day. You may need to cut back on TV and video game time to encourage children to get more active. It is also worth giving active chores.

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