

Chewing the fat about our children's health

Sinéad Bannon

School of Food & Nutritional Sciences, UCC

Introduction

Popular culture is jammed with TV shows about our health and what we eat, whether it's 'The Health Squad' making people healthy from the inside out or Gillian McKeith telling people 'You Are What You Eat'. Our study, looking extensively at the eating habits of children aged 5-12 years in Ireland, shows us that the extreme picture painted by the media has some basis in fact. Around one in five children are overweight or obese, and many children's diets are lacking in important nutrients and fibre; it is time to find out why and what implications this may have on their future health.

The National Children's Food Survey was a comprehensive survey carried out by researchers in UCC and UCD, investigating the eating habits of children in Ireland between the ages of 5 and 12 years. The survey has provided a valuable insight into the diets of children in this country.

Children from across Ireland kept a food diary for 7 days, recording every item of food and drink they consumed. In addition to collecting dietary data, data on physical activity levels, anthropometric measurements (i.e., weight, height, leg length, waist and hip circumference) and health and lifestyle characteristics of children and their parents/guardians were also collected.

Results

The results showed that approximately one in five children in Ireland (22%) was overweight or obese with many children's diets also lacking in important nutrients and fibre. With poor diet recognised to play a central role in the development of many of today's "diseases of affluence", including heart disease, obesity, high blood pressure, diabetes, certain cancers and bone disease, the implications for the future health of Irish society are clear. For instance, obesity imposes a significant human burden of morbidity, mortality, social exclusion and discrimination. Along with additional costs to government around social care and health care, obesity also reduces tax revenue.

Childhood overweight/obesity

When the results of the last survey of this age group, in 1990, are compared to the present results, childhood overweight and obesity showed a clear increase from 12% to 22%. This high prevalence of overweight and obesity may be attributed to the fact that over 40% of children exceeded the daily recommendation for fat intake (<35% of total energy intake). The main food groups contributing to the children's fat intakes were 'dairy products', 'confectionery/snacks/biscuits' and 'meat and meat products'. Data from the health and lifestyle questionnaires has shown that children who watched more television (>2 hours per day) were more likely to be overweight than those who watched less television. Furthermore, children were more likely to be overweight or obese if their parents were.

Energy

Where are children getting their energy from? The main food groups contributing to children's energy intake were 'breads and cereals', 'confectionery/snacks/biscuits', 'dairy products', and 'meat and meat products'. While staple foods such as bread and cereals were the greatest contributors, confectionery, snacks and biscuits were also high contributors to their energy intake; this may be one of the reasons why there is such a high proportion of children overweight.

Food consumption

The survey showed that, in general, children are not consuming enough fruit, vegetables and brown/wholegrain breads, and their diets are high in foods of poorer dietary quality, such as confectionery, biscuits, snacks and processed meats. Furthermore, the intake of salt is too high in children, with 60% exceeding the limit, which can put the children at risk of increased blood pressure. The main foods contributing to their salt intake are processed meats and breads. As previously mentioned, 40% of children are exceeding the recommendation for fat, and the main contributors are dairy products, confectionery and processed meats.

Nutrients

As regards nutrients, children are not getting enough calcium, iron, vitamin D and folate. Calcium and vitamin D are important for bone health, while folate is important for DNA synthesis and growth and development. Iron is important for oxygen transport around the body. Vitamin D is normally synthesised on the skin from the sunshine, but in Ireland we often do not get enough sun in order to make vitamin D and so have to rely on food sources, such as oily fish, eggs, liver and butter, to get our intake. Calcium can be obtained

from dairy products, such as milk, cheese and yogurt, and tinned sardines, folate from liver, fruit and vegetables, while sources of iron include meat, dark green leafy vegetables and eggs. Nowadays, fortified foods, such as breakfast cereals, cereal bars and breads, are also valuable sources of these nutrients.

In relation to fibre, 64% of children are not consuming adequate amounts. Inadequate fibre intakes can lead to constipation and prolonged inadequacy may put the child's future adult health at risk of colon cancer. The greatest contributors to fibre intake in the children were breads, breakfast cereals, fruit and vegetables. Children with higher fibre intakes were eating these foods in greater quantities and/or more frequently than children with lower fibre intakes. Even though most of the children consumed white breads, those with higher fibre intakes were eating more of the brown and wholegrain variety than those with lower fibre intakes.

Conclusion

What can be concluded from this research? Firstly, there is a high rate of overweight and obesity in children in Ireland, with around one in five children either overweight or obese. This can partly be explained by the fact that many children (40%) are exceeding the recommended level of fat in the diet. Children's salt intakes are too high, and processed meats and breads were the main sources. Fibre intakes are also inadequate, as are intakes of vitamin D, calcium, iron and folate.

So what does all of this mean and how can this research be utilised? Surveys like ours highlight nutritional issues that need to be addressed. The data provide an important update for Government agencies on obesity statistics in children in Ireland. The information can be used by the government, its agencies and other interested groups to formulate timely, appropriate and achievable food-based dietary guidelines for healthy eating. It can also provide a basis for public health campaigns to promote a healthier population and reduce the risk of certain diseases. Furthermore, it is widely recognised that dietary habits of people are generally developed in childhood and, as such, it is important to instill good eating practices early on and try and help protect children's future adult health.

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