

New challenges identified in early childhood nutrition

In the first of this year's series on child health, we present an overview of some nutritional issues that have emerged following a number of recent Irish studies

DESPITE the abundance of food and dietary variety in European countries like Ireland, public health bodies are still grappling with the problem of nutritional problems in children and how to get the food balance right.

From low rates of breast-feeding to specific nutritional deficiencies and child over-eating, several Irish research studies show that despite education and lots of choice, dietary problems are still high on the agenda when it comes to child health.

At a recent Food Safety Authority seminar in Dublin it was pointed out that Ireland has the lowest breast-feeding rates in Europe. Furthermore, nearly three-in-four babies are being weaned onto solid foods too early. Of more recent concern, according to Dr Mary Flynn, chief specialist in public health nutrition, Food Safety Authority of Ireland (FSAI), is evidence of the widespread use of foods that should never be part of an infant's diet including crisps, chocolate pudding and soft drinks.

A scientific report launched by the FSAI late last year produced key recommendations for health professionals on improving infant nutrition.¹ One of the newer recommendations was the need to supplement infants from birth with vitamin D to prevent rickets. There was also special guidance on the safe preparation of powdered infant formulae to prevent food borne illness.

Underpinning the recommendations is the importance of a good nutritional start for children. "It is now recognised world-wide that the first 1,000 days of a human's life, starting at conception and ending at age two years, presents a unique opportunity to shape healthier futures. We now know that health problems, including heart disease, diabetes and obesity, that affect many adults today, may be partly due to the inadequacy of their mother's diet during pregnancy and how they were fed as babies, especially during the first year of life", commented Dr Flynn.

The report places a major emphasis on nutrition in pre-conception and pregnancy and the importance of breast-feeding. It addresses formula feeding, weaning, dental health, growth monitoring and common nutritional health issues that may arise during infancy.

On the flip side of nutritional deficiency is the spiralling prevalence of childhood obesity. This has emerged as a problem even in toddlers in recent years and the thinking is that it may have its origins in poor infant feeding practices, according to the FSAI.

Key findings from the National Pre-School Nutrition Survey² painted a bleak picture. Findings included that 23% of two- to four-year-olds are overweight or obese. Almost one-in-four one-year-olds and 10% of two- to three-year-olds have

inadequate iron intake. In addition, a significant proportion of children are at risk from inadequate intake of Vitamin D, particularly in winter.

This study was carried out by researchers at UCC and UCD, who are part of the Irish University Nutrition Alliance (IUNA). It included 500 children between one and four years and data was gathered on food and nutrient intake, physical measurements and health and lifestyle factors. Aspects such as the child's general health, early feeding and weaning practices, eating behaviour and childcare arrangements were also studied.

At the launch of this report the need for clear guidelines on healthy eating for the one- to four-year-old age group was underlined. This includes appropriate portion size, a reduction in salt and sugar, and a higher intake of fruit, vegetables and key vitamins and minerals.

The National Children's Food Survey,³ carried out by Safefood and the HSE, also identified a low intake of key nutrients such as calcium and iron. It also found a low intake of fruit and vegetables and a high intake of fat and salt among many children.

Interestingly, this survey identified that almost 90% of a child's food intake originated in the home, despite perceptions to the contrary. This underlines the importance of the home at the centre of health and wellbeing in five- to 12-year-olds and emphasises the value of health professionals and campaigns targeting this area. There have been some initiatives in this area such as Little Steps.⁴

Key child nutritional issues that have been identified in recent Irish research include those listed below. Subsequent articles will focus on some of these as well as other child health areas.

- Low rates of breast-feeding
- Weaning to solids prematurely
- Junk food in infant diets
- Obesity
- Vitamin D deficiency
- Iron deficiency
- Low intake of calcium
- Low intake of fruit and vegetables
- High intake of fat and salt.

- Geraldine Meagan

1. *Scientific recommendations for a National Infant Feeding Policy, 2nd Edition. Food Safety Authority of Ireland 2011.*

2. *National Pre-School Nutrition Survey. Summary report. Irish Universities Nutrition Alliance 2012. Food and nutrient intakes, physical measurements and barrier to healthy eating.*

3. *Body weight and eating habits in 5-12 year old children. The National Children's Food Survey. Summary report 2011. Safefood/HSE*

4. www.littlesteps.eu/home/