



TOO MANY UK CHILDREN STILL FACE POOR DIET AND NUTRITION, NEW HEALTH SUPPLEMENTS INFORMATION STUDY FINDS

Children in the UK are risking serious illnesses later in life because of poor diet and nutrition while they are young, an important new study just published¹ on behalf of the Health Supplements Information Service (HSIS) has found.

Health experts are warning that all too many British youngsters face a ticking health time bomb because of high intakes of saturated fat, salt and sugar and inadequate amounts of essential vitamins and minerals and essential fatty acids from oil rich fish. While the researchers found that on average diets have improved in recent years, they say that there are still major nutritional problems that were cause for concern and need addressing urgently.

Proper nutrition in childhood is essential for growth, development and long-term health into adulthood. There is mounting evidence that problems with child nutrition can significantly contribute to chronic and degenerative diseases such as type 2 diabetes, cardiovascular disease and cancer.

In addition, poor diets and too little exercise have led to childhood obesity, with figures showing that one in 10 youngsters in school reception classes (aged 4 to 5) are obese, and this increases to 18% of those in year 6 (aged 10 to 11). Similarly, dental decay and even type 2 diabetes are becoming more of a problem in children.

To gauge the extent of the problem, the Health Supplement Information Service commissioned in-depth research into the quality of children's diets. Independent dietitian and registered public health nutritionist Dr Carrie Ruxton and Dr Emma Derbyshire, senior lecturer in human nutrition at the Manchester Metropolitan University, analysed nearly 60 previously published papers and reports on the topic.

The research team found that all too frequently, intakes of essential nutrients fell badly short of recommended guidelines and similarly often exceeded the recommended allowances for saturated fat, sugar and salt. In particular, the researchers found that iron, calcium, magnesium, potassium and zinc are especially low in some groups. They also point to possible problems with intakes of fibre, omega-3 fatty acids and vitamin D as well as fruit and vegetable consumption.

Commenting on the research review study commissioned by HSIS, lead researcher Dr Carrie Ruxton says: "Even in the 21st century, it is not uncommon for British children to have an inadequate nutritional status. Thus, further improvements are needed. Higher intakes of fruit, vegetables and oily fish would help children to meet dietary and nutrient targets. Another option is supplementation, for instance multi-nutrient supplements and fish oil supplements, which can help children to meet nutrient targets while further dietary improvements are ongoing. This is especially vital for those children and teenagers who are fussy eaters and do not like oily fish for instance, which is full of essential nutrients such as Omega 3."

¹ Nutrition & Food Science Journal – 9/2/11

Low vitamin D levels in childhood can lead to a greater risk of low bone mass and osteoporosis later in life. Inadequate intakes of certain nutrients such as iron, iodine, folate, zinc, vitamin B12 and long-chain omega-3 polyunsaturated fatty acids have also been linked with affecting children's cognition and intellectual ability.

Much of the published research and data focuses on analysis of the UK National Diet and Nutrition Survey (NDNS), a rolling cross-sectional survey of food consumption, nutrient intakes and nutritional status of people aged 18 months and older in the UK. The first – and latest - report of the programme, funded by the Food Standards Agency and the Department of Health, includes in-depth data on food consumption and nutrient intakes for children aged 1.5 to 18 years taken between 2008 and 2009.

In the latest research for HSIS, the researchers highlight findings by the Scientific Advisory Committee on Nutrition - an advisory committee of independent experts that provides advice to the Food Standards Agency and Department of Health. The SACN report found that while children's diets had improved over the last 15 years, with certain nutritional areas were still significantly lacking.

Supplementation levels

The data shows that vitamin and mineral supplements appear to make a significant contribution to overall nutrient intakes in children aged 2-17 years. Supplement use appears to vary between ethnic groups, with Asian or Afro-Caribbean children being most likely to take supplements, particularly cod liver oil. However, the researchers found that children most in need of supplements are often less likely to take them.

Among children aged 4-12 years, multivitamins were the most commonly-consumed supplement, although the researchers say that iron is also important as deficiency is common in UK children, especially in those who are vegetarian or have low meat intakes.

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The Health Supplements Information Service (HSIS) (www.hsis.org.uk; Tel: 020 7052 8955) is an independent information body, set up to provide balanced information on vitamins and minerals. It is supported by a restricted educational grant from the Proprietary Association of Great Britain (PAGB).

Note to editors:

Salt

The largest contributors of sodium purchasers of salt are table salt (23%), processed meat (18%), bread and bakery products (13%), dairy products (12%). More than a third of sodium purchased (37%) was accounted for by bread, bacon, milk, cheese and sauces. (AJCN, December 2010).

Fruit and vegetables

The research for HSIS shows that average consumption of fruit and veg was 170-190g/day in younger children, increasing to an average of 200g/day in 15-18 year olds. While there is no child-specific target for grams of fruit and vegetables, the adult guideline is 400g/day or more - children aged over 11 would be expected to need close to this. In addition, 20% of 4 -18 year olds consumed no fruit at all (excluding fruit juice) while 4% ate no vegetables. Other research indicated that among 11-18

year olds, boys had on average 3.4 portions of fruit and veg a day, and girls had on average 2.8. However, only 22% of boys and 7% of girls met the five-a-day target.

Oily fish / omega 3 essential fatty acids

Average intakes of oily fish ranged between 5-10g/week and 5-7g/week for males and females aged 4-18 years respectively, the equivalent of less than 0.1 of a portion per week, which is far lower than the recommended two portions per week.

Nutrients and minerals

The research shows that in young females, only 58% currently meet the reference nutrient intake (RNI) for iron, and previous studies have found that young vegetarian girls consuming fibre-rich diets are most at risk of iron deficiency. In addition, calcium, magnesium, zinc, potassium, iodine and folate deficiencies appear to be increasingly apparent, especially in children from low-income groups.

Vitamin D

There are increasing worries that many UK children are vitamin D deficient, and the research backs up this concern, particularly for children in low-income families. Data from this group shows that boys and girls consumed on average 2.2µg and 1.92µg vitamin D per day respectively - these intakes are less than half of the European Recommended Daily Allowance of 5µg. In one study of 12-15 year olds in Northern Ireland daily vitamin D intakes were just 1.7µg. Another study found that 36% of school-age children were defined as vitamin D deficient, rising to 46% during the winter because of limited sunshine. Vitamin D is essential required for normal bone growth and development during childhood and adolescence and the latest research has linked vitamin D deficiency with a host of serious health issues.