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STUDY SHOWS DIETARY PATTERNS RELATE TO FATNESS IN CHILDREN

Its official! An energy dense diet, high in fat and low in fibre leads to obesity in children. Scientists at the MRC Human Nutrition Research have taken a closer look at the eating habits of children and have identified a shopping basket of foods that are linked to a **four-fold** increase in obesity risk.

Published in this month's American Journal of Clinical Nutrition, the study is the first of its kind to investigate the impact of multiple foods on fatness.¹ Previous studies have looked at the effect of single nutrients or food groups e.g. high fat foods and usually relate this to Body Mass Index. This is the first study which has considered the diet as a whole in relation to later fatness. Based on the records of the diets of over 600 children participating in the Children of the 90s study, scientists from the MRC HNR, Cambridge and University of Bristol looked at food consumption at aged 5 and 7 years and using statistical analysis were able to show the impact of diet choices on the risk of becoming obese.

The researchers also identified a number of particularly positive patterns. Most striking was that fruit and vegetables are an important part of the diet that significantly reduces the chances of your children becoming obese – the first study of its kind to show this link.

Commenting on the study, Dr Susan Jebb said "The findings of this study highlight the importance of childhood dietary patterns as determinants of later obesity. There is a need to reinforce initiatives which develop positive dietary habits at a young age, especially the importance of eating fruit and vegetables."

Other recent studies published by this group have investigated the effects of soft drinks on fatness² and the effect energy density (how tightly energy is packed into food) has on the appetite regulation system.³

If your shopping basket looks like this your children are 4 times more likely to be obese	If your shopping basket looks like this your children are four times more likely to maintain a healthy weight
White bread Crisps and savoury snacks Chocolate and confectionery Biscuits and cakes Processed meats	Fresh fruit Vegetables High fibre breakfast cereals High fibre bread Boiled/baked potatoes

Putting healthier eating into practice can be challenging with children, but the following tips can help to bring a little more harmony to your family.

Use Non Food Rewards - Offering a sweet pudding as a reward for your child eating their green's simply reinforces the idea that vegetables are unpleasant and something to be endured rather than enjoyed and that pudding is a great treat.

Keep Offering New Fruit and Vegetables Again and Again - Studies show that after this kind of repeated exposure most children will eventually accept a food.

Avoid Food Bans - Banned foods tend to create a desire for the forbidden treat.

ENDS

Notes to Editors

1. Johnson L, Mander AP, Jones LR, Emmet PM, Jebb SA. An energy dense, low fibre, high fat dietary pattern is associated with increased fatness in childhood. *AJCN* 2008; 87

2. Johnson L, Mander AP, Jones LR, Emmet PM, Jebb SA. Is sugar-sweetened beverage consumption associated with increased fatness in children? *Nutrition* 2007 Jul-Aug; 23 (7-8): 557-63

3. Johnson L, Mander AP, Jones LR, Emmet PM, Jebb SA. A prospective analysis of dietary energy density at age 5 and 7 years and fatness at 9 years among UK children. *Int J Obes* 2007 doi: 10.1038/sj.ijo.0803746

The Children of the 90s study (also known as ALSPAC - The Avon Longitudinal Study of Parents and Children) is a unique ongoing research project based in the University of Bristol. It enrolled 14,000 mothers during pregnancy in 1991-2 and has followed most of the children and parents in minute detail ever since.

Medical Research Council Collaborative Centre for Human Nutrition Research, Cambridge, carries out scientific research into relationships between nutrition and health, of national and international priority, through partnerships with other academic groups, governments, industry and others. It is also an independent, authoritative source of scientific advice and information.

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