

Researchers embark on obesity prevention trial in West Midlands school children

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The effects of providing opportunities for healthier diet and increasing physical activity levels of primary school children in the region are to be examined in a new clinical trial. Researchers at the University of Birmingham's School of Health and Population Sciences are seeking to combat the rising obesity trend by targeting the school and family environment of the younger generation so that they will become healthier adults.

Obesity is one of the most serious public health problems of the twenty-first century and carries an increased risk of heart disease, diabetes and other adverse health effects, which strain already scarce NHS resources. The effect of activities designed to promote healthier eating habits and to increase the physical activity of children at school and in the local community will be tested in one of the largest UK studies funded by the National Institute for Health Research (NIHR) Health Technology Assessment (HTA) programme.

Now a major public health issue, obesity costs the NHS approximately £500 million a year and can lead to untimely death, reducing life expectancy by up to 10 years. Obesity rates in the UK are the highest in Europe and UK children are rated third in the world's obesity league, with 10% of 6 year olds affected.

This has become an increasingly localised problem; Birmingham residents have higher than average obesity levels, with more than 25% of the city classified as having a BMI greater than 30, and almost 20% of year 6 pupils in the region fall into this bracket.

Trial leader, Dr Peymane Adab, Senior Lecturer in Public Health and Epidemiology at the University of Birmingham explains:

"The rate of obesity in Birmingham is increasing year on year. In our previous studies we have seen that from reception until year 6 when children leave primary school, the proportion of children who are overweight increases from 23 to 36% - so from one in 4 to one in 3 children.

"Children who are overweight are more likely to remain overweight as adults and even from the age of 7; a child who is overweight has a higher risk of heart disease and of dying prematurely. If we are able to reverse the rising obesity trend, it would have significant impact on the life expectancy, health and quality of life of our children."

Over 2,000 primary schoolchildren from 50 local schools will take part in the study, where half of the participants will undertake a range of healthy activities through an obesity intervention package, and the other half will be used as a control and continue in their usual school and community activities, allowing for a comparison of changes in diet and physical activity levels over time between the two groups.

Dr Adab adds:

"So far initiatives and research to prevent obesity have had limited success. This is partly because the focus has been on trying to change individual behaviour, and without full consideration of the factors in our environment that promote certain behaviours.

"We will compare weight status, diet and physical activity levels among children in half the schools where we will implement our activities, with children in other schools where they will continue with their normal activities. We hope that we can demonstrate a difference in the number of children who become overweight between the two types of schools."

For more information, please contact clinical trial leader, Dr Peymane Adab via Tel: 0121 414 3777 or p.adab@bham.ac.uk (<mailto:p.adab@bham.ac.uk>) or visit the National Institute for Health Research website www.hta.ac.uk (<http://www.hta.ac.uk>).

Notes to Editors

About the NIHR

1. The National Institute for Health Research Health Technology Assessment (NIHR HTA) programme commissions research about the effectiveness, costs, and broader impact of health technologies for those who use, manage and provide care in the NHS. It is the largest NIHR programme and publishes the results of its research in the Health Technology Assessment journal, with over 550 issues published to date. The journal's 2008 Impact Factor (6.91) ranked it in the top 10% of medical and health-related journals. All issues are available for download free of charge from the website, www.hta.ac.uk (<http://www.hta.ac.uk>).

2. The National Institute for Health Research provides the framework through which the research staff and research infrastructure of the NHS in England is positioned, maintained and managed as a national research facility. The NIHR provides the NHS with the support and infrastructure it needs to conduct first-class research funded by the Government and its partners alongside high quality patient care, education and training. Its aim is to support outstanding individuals (both leaders and collaborators), working in world-class facilities (both NHS and university), conducting leading edge research focused on the needs of patients. www.nihr.ac.uk.

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