Medical Xpress

'Nurture' more important than 'nature' in childhood obesity says research

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Juan Carreño de Miranda's "La monstrua desnuda" (The Nude Monster) painting.

Parents' lifestyles, rather than their genes, are primarily responsible for their children being overweight according to research by the Centre for Economic Performance, based at the London School of Economics and Political Science (LSE).

Researchers compared the weight of biological and adopted children to that of their parents to determine whether children inherit their weight

problems or whether they are the result of the environment they grow up in.

They found that when both adoptive parents are overweight, the likelihood of an adopted child being overweight is up to 21 per cent higher than when the parents are not overweight. Because these children are adopted their weight problems can be largely attributed to their parents' lifestyles rather than their genes.

In comparison, children who have two biological parents who are overweight were found to be 27 per cent more likely to be overweight – just six percentage points more than adopted children, showing the relatively small influence of genetics.

Dr Joan Costa Font, Associate Professor of Political Economy at LSE, said: "The good news is that our research shows that we can do something about children's weight problems.

"Although initiatives that target schools and children themselves are admirable, our results suggest that the primary focus should be on helping parents adopt healthier lifestyles and be better role models concerning healthy eating and physical exercise."

When the researchers looked at the effect of only a mother or father being overweight the results are more mixed. Among adoptees they found no effect when only mothers were overweight. In contrast, when only fathers were overweight or obese, there was a small effect.

Dr Costa Font said: "This may be explained by the fact that women are still primarily in charge of the cooking in the home and may tend to over feed their children and partners.

"Any policies designed to influence parents' lifestyles will need to take a

holistic approach and focus on both mothers and fathers to be effective."

The research also shows that being extremely overweight, (obese) – in contrast to being overweight – is more strongly influenced by genetics than by lifestyle factors.

The transmission of being overweight or obese from parents to children, due to lifestyle factors, was not found to be affected by children having a full-time working mother.

In their analysis the researchers took into account a number of factors including the parents' education and age and the children's age and gender. They also took into account characteristics that adoptees may have which make them more or less susceptible to being overweight or obese than biological children.

The data came from compiling the Health Survey for England's (HSE) children's surveys 1997- 2009. The HSE is an annual survey designed to measure health and health-related behaviours, including weight and height, body mass index, fruit and vegetable consumption, alcohol consumption and smoking in adults and children living in private households in England.

The research was undertaken by Joan Costa-Font, Mireia Jofre-Bonet, Professor in Economics at City University, and Professor Julian Le Grand, Professor of Social Policy at LSE.

More information: The report is available online: cep.lse.ac.uk/pubs/download/dp1324.pdf

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