News Release

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Couples' lifestyle choices impact on obesity risk, study finds

The lifestyle a person shares with their partner has a greater influence on their chances of becoming obese than their upbringing, research suggests.

By middle age, choices made by couples – including those linked to diet and exercise – have a much greater impact than the lifestyle each shared with siblings and parents growing up.

Although by middle age siblings have a shared risk of being obese, this is mostly attributable to their shared genetic inheritance rather than any habits instilled during their shared upbringing.

Researchers say the study will help scientists better understand links between obesity, genetics and lifestyle habits.

Its findings reinforce the message that lifestyle changes in adulthood can have a significant impact in tackling obesity, regardless of a person's genetic profile.

The team analysed data provided by 20,000 people from Scottish families. They compared people's family genetics and home environments in childhood and adulthood and related these to measures linked to health and obesity.

A total of 16 measures were considered including, waist to hip ratio, blood pressure, body fat content and body mass index.

The information was originally gathered as part of the Generation Scotland project – a national resource of health data that helps researchers to investigate genetic links to health conditions.

The study has been published in the journal *PLoS Genetics* and was led by Professor Chris Haley of the Medical Research Council's Human Genetics Unit at the University of Edinburgh.

Professor Haley said: "Although genetics accounts for a significant proportion of the variation between people, our study has shown that the environment you share with your partner in adulthood also influences whether you become obese and this is more important than your upbringing. The findings also show that even people who come from families with a history of obesity can reduce their risk by changing their lifestyle habits."

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