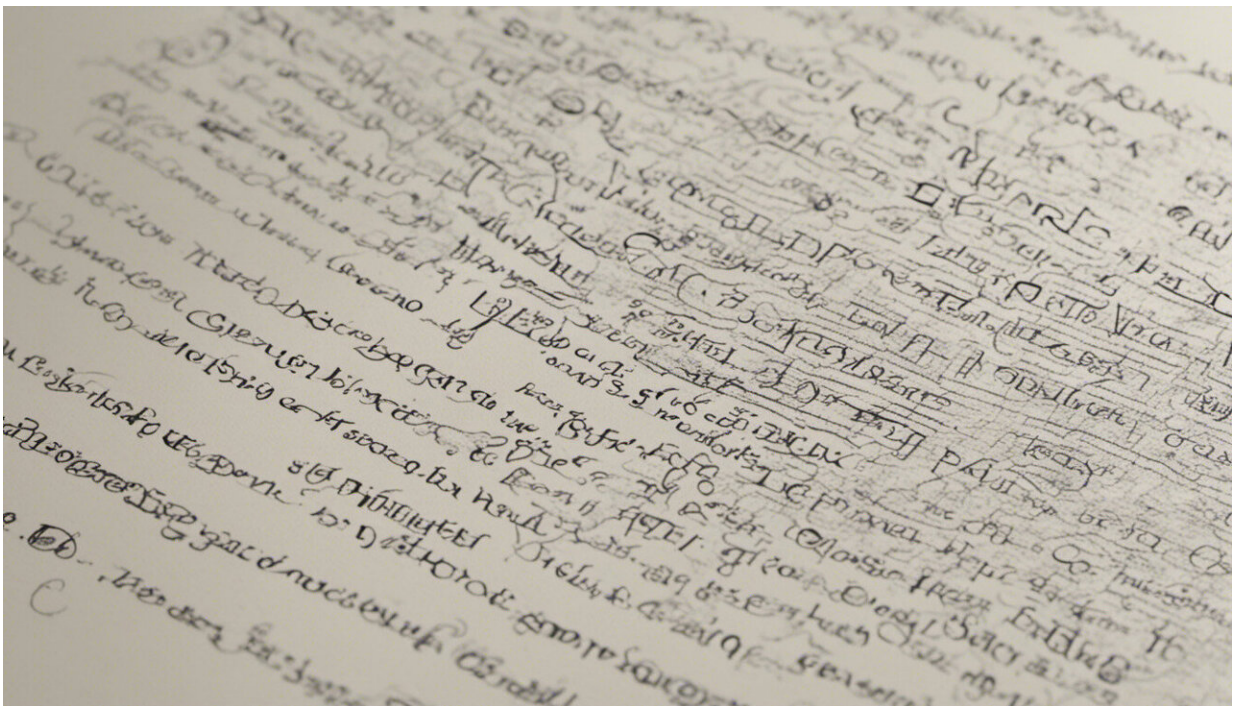


# Researchers investigate whether obesity and chronic diseases can be passed down three generations

November 11 2014, by Vanessa Mannix Coppard

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Credit: AI-generated image ([disclaimer](#))

A University of Queensland study is one of the world's first to investigate whether obesity and chronic diseases can be passed down three generations.

Dr Abdullah Al Mamun, from UQ's School of Population Health, said he would lead research into how grandparents' and parental [health](#), lifestyle and socio-economic status could create a family legacy of obesity and its associated [health problems](#).

"Initial research suggests that if your grandparents were obese, you have a greater chance of being obese as well," he said.

"We're not sure if it's because of lifestyle or behavioural factors, or if there's a genetic link."

Dr Mamun said the obesity of maternal grandmothers appeared to have a greater impact on the obesity of grandchildren, than that of paternal grandmothers.

"As genetic and lifestyle factors are shared equally across maternal and paternal lines, the stronger association with the maternal grandmother may suggest that a pregnant woman's diet and her exposure to conditions such as gestational diabetes and [high blood pressure](#) may have an impact on not only her child but her grandchild," he said.

Researchers will also examine how poor diet, little exercise, sedentary behaviour, alcohol and tobacco use and socio-economic disadvantage can increase the prevalence of obesity in subsequent generations.

Dr Mamun said that the link appeared to be stronger when grandparents were obese and also suffered from chronic conditions linked to obesity, including Type 2 diabetes, asthma, depression and sleep problems.

"We hope that by examining these links we can better understand the long-term impact of obesity in families and help identify how early intervention can prevent childhood and [adolescent obesity](#)," Dr Mamun said.

Dr Mamun's project received a \$1.2 million grant from the National Health and Medical Research Council.

Other investigators include Professor Jake Najman, Professor Gail Williams, Associate Professor Alexandra Clavarino, Associate Professor Rosa Alati, Associate Professor Michael O'Callaghan and Professor David McIntyre.

The research will involve almost 7000 participants at the Mater-University of Queensland Study of Pregnancy, one of the world's longest-running and most comprehensive studies of how pregnancy, early childhood and puberty can impact the development of [obesity](#), diabetes and [mental health problems](#) in young adults.

Provided by University of Queensland

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