

Engineered bacteria keep mice lean

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Credit: Martha Sexton/public domain

Obesity levels are rising throughout the world. As obesity rates increase, so do the incidences of diabetes, heart disease, and other serious health conditions.

The bacteria within an individual's gut can influence their susceptibility to these disorders. Therefore, altering the microbe population in the gut could prevent or reverse disease.

A June 24th study in the *Journal of Clinical Investigation* demonstrates that modified bacteria can prevent weight gain in mice. Sean Davies and colleagues at Vanderbilt University made bacteria that produce a compound called NAPE, which signals to the brain to stop eating.

Mice that consumed NAPE-producing bacteria in their water ate less when given high fat food, which limited [weight gain](#) and associated symptoms.

More information: Paper: Incorporation of therapeutically modified bacteria into gut microbiota inhibits obesity, *J Clin Invest.* [DOI: 10.1172/JCI72517](https://doi.org/10.1172/JCI72517)

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