Genetic 'switch' may trigger obesity

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

For those who are struggling with their weight, a new study published in Cell journal suggests that there is a switch like mechanism that determines when one can be lean or obese.

The researchers discovered the reason why obesity genes are triggered in some children born to overweight parents, but not to others, Medical Daily reported.

"We're interested in the mechanisms that can make identical twins come out not so identical, and how these mechanisms contribute to disease," said senior study author J. Andrew Pospisilik, a researcher at the Max Planck Institute of Immunobiology and Epigenetics, in a press release.

To determine if the obesity genes can be altered, the team tested twin mice with the same obesity gene mutation. They learned that, when the obesity gene, Trim28 mutates it triggers genes to produce either lean or obese individuals. Since the subjects of the study were twins and have the same genetic backgrounds, they were able to turn genes on and off to see which ones would gain weight. The concept is called polyphenism.

Pospisilik and his team produced a large population of twin mice. One group has Trim28 and the other has none. The mice have identical genes and were raised as equally as possible. The researchers found out that those without Trim28 have different body masses.

Read full, original post: Switching Off Obesity Genes Possible to Stay Lean: Study