

## Why are some children less prone to obesity? Epigenetics may offer clues

Does a mother's weight-loss surgery affect her child's risk of obesity? A Laval University [study](#) that looked at children born to mothers who'd undergone gastric bypass surgery prior to their pregnancy, has prompted scientists to try to answer this question. The study centered around the idea of epigenetic inheritance, or how characteristics can be passed down from parent to child without ever touching the genetic code.

Researchers knew the children were less prone to obesity, but as they tried to figure out why, they found something unexpected. The children's genes were different — not their genetic code itself, but the markers in between that code. It was a small study, but the results were striking: more than 5,000 genes were expressed differently when parents had undergone the surgery. The surgery had changed something in the mother's DNA, and when the children were born just a few years later, it appeared to have changed in them too.

Together, a number of recent studies on epigenetic inheritance are having a big impact on the way scientists are studying biological inheritance and giving researchers a new approach to studying the human body, particularly for inherited factors like obesity or cancer risk.

**Read the full, original story:** [The shadow genome: why DNA isn't destiny](#)

### **Additional Resources:**

- [Nature, nurture or neither? Epigenetics is the new twist in an age-old argument](#), Independent
- [Can we inherit fear of a smell? The latest on transgenerational epigenetics](#), Genetic Literacy Project