

Good nutrition starts early

April 25 2008

You are what you eat, as the old saying goes. Maybe so, but increasingly researchers are finding that you are also what your mother ate – maternal nutrition has profound consequences on the health of offspring.

It is well known that smaller babies are more likely to suffer from heart disease, stroke, hypertension and diabetes. More recently, poor nutrition around the time of fertilization and egg implantation have also been shown to be detrimental in adult life.

Now Adam Watkins and colleagues, writing in *The Journal of Physiology*, have shown that, even before conception, maternal diet is vital to the health of the next generation. Even as the egg first leaves the ovary and begins to mature, it is subject to nutritional deficiencies in the mother that can profoundly affect its viability.

The researchers fed female mice on a special low-protein diet during one three-and-a-half day ovulatory cycle, then let the mice mate. They studied the offspring and the results were profound, with the pups suffering from an array of maladies.

"They were hypertensive, had poorly functioning blood vessels that did not relax properly when treated with reagents that should dilate them, had kidneys of abnormal structure and size, and exhibited reduced exploratory activity," Watkins explained.

"These disturbing effects cannot necessarily be extrapolated to the human condition, but do illustrate the need to investigate whether such a



link might exist in women."

Source: Wiley

Citation: Good nutrition starts early (2008, April 25) retrieved 4 May 2024 from <u>https://medicalxpress.com/news/2008-04-good-nutrition-early.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.