

Does breastfeeding hormone protect against type 2 diabetes?

October 12 2018, by Serena Gordon, Healthday Reporter



(HealthDay)—The hormone prolactin—most commonly associated with

breastfeeding—may play a role in reducing the risk of type 2 diabetes, a new study suggests.

Researchers found that women with the highest levels of the hormone, though still in the normal range, had a 27 percent reduced risk of developing type 2 [diabetes](#) compared to those with the lowest levels in the normal range.

"Prolactin is a multi-function hormone—it is not only related to pregnancy and breastfeeding, it also plays an important role in many other biological functions, like metabolism, immune regulation and water balance," said study lead author Jun Li. She is a post-doctoral research fellow at the Harvard T.H. Chan School of Public Health in Boston.

Li said previous studies have shown that [prolactin](#) may affect insulin secretion and sensitivity. Insulin carries sugar from the bloodstream into the body's cells to be used as fuel. People with type 2 diabetes don't use insulin efficiently, and as a result, their blood sugar levels rise too high.

Although the study linked higher (but still normal) levels of prolactin to a lower risk of developing type 2 diabetes, Li said it's not yet clear if there are any practical implications from these findings.

"It's too early to tell if altering prolactin concentrations is a suitable way for diabetes prevention," she said, adding that normally high prolactin levels are associated with a higher breast cancer risk. Plus, higher-than-normal levels can promote weight gain and increase insulin resistance, along with other adverse effects.

"Future studies are needed to find out the mechanism and come up with practical strategies," Li said.

Diabetes expert Dr. Joel Zonszein said much about prolactin is unknown. "It's a hormone made by the pituitary gland, and in women it goes up during lactation. But, we don't really know what it does in men."

What doctors do know is that prolactin levels normally vary a lot, he said. Zonszein is director of the clinical diabetes center at Montefiore Medical Center in New York City.

Zonszein also noted that a diabetes medication called Cycloset (bromocriptine mesylate) lowers prolactin levels at the same time it lowers [blood sugar levels](#)—an effect that would seem to contradict the new findings.

The study included more than 8,600 healthy American women whose health was tracked over time as part of a national study. Most were white and in their late 40s or 50s when the study began.

From that group, 699 women developed type 2 diabetes during an average follow-up period of 22 years.

The researchers adjusted the data to account for women's menopausal status and other diabetes risk factors.

The findings showed that the higher the women's prolactin levels (while still in the normal range), the less likely they were to develop [type 2 diabetes](#).

But the study does not prove cause and effect.

The report was published Oct. 11 in the journal *Diabetologia*.

More information: Learn more about [preventing type 2 diabetes](#) from the U.S. National Institute of Diabetes and Digestive and Kidney

Diseases.

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