

Can high-protein, low-carb diet boost fertility treatment?

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That's the conclusion of small, early study of women undergoing in vitro fertilization.

(HealthDay)—Women who are undergoing fertility treatment may be more likely to conceive if they get a good amount of protein in their diets, a small new study suggests.

The study, of 120 [women](#) undergoing in [vitro fertilization](#) (IVF) at one medical center, found that those who ate plenty of [protein](#) and relatively few carbohydrates were more likely to become pregnant.

Among women who got at least 25 percent of their daily calories from protein, 67 percent became pregnant. That compared with 32 percent of women who had less protein in their diets. What's more, women who got plenty of protein and relatively few carbohydrates—less than 40 percent of their calories—had the highest pregnancy rate, at 80 percent.

Experts cautioned that the findings do not mean that women with [fertility problems](#) should load up on steak, eggs and butter. But they did

agree that the results point to an important role of [diet](#) in a woman's chances of conceiving.

"I think the message to infertility patients is to pay attention to what you eat," said Dr. James Grifo, program director at the NYU Fertility Center in New York City, who was not involved in the study.

"There aren't many things you have control over when you're undergoing fertility treatment," Grifo said. "But what you eat is one."

He did caution against "overinterpreting" the findings, which are being presented Monday at the annual meeting of the American College of Obstetricians and Gynecologists, in New Orleans. Because this study was presented at a medical meeting, the data and conclusions should be viewed as preliminary until published in a peer-reviewed journal.

The study group was a small, select group of women, Grifo said, and it's not clear precisely why women who ate more protein had a higher IVF success rate.

One reason, Grifo speculated, could be that women who eat a lot of protein get far fewer "[empty calories](#)" from [processed foods](#), which feature heavily in the typical U.S. diet.

Processed foods are often high in simple carbohydrates and, in theory, the effects of those carbs on insulin and other hormones could affect women's fertility, Grifo said.

Dr. Jeffrey Russell, who led the study, said he thinks both the extra protein and carb reduction matter. Dietary protein—whatever the form—may be key in the quality of a woman's eggs, said Russell, who directs the Delaware Institute for Reproductive Medicine in Newark, Del.

For the study, Russell's team had 120 women keep diet records for three days before undergoing IVF. They used a software program to calculate how much protein and carbs the women consumed each day.

It turned out that 48 women got at least 25 percent of their daily calories from protein, and 67 percent of them became pregnant. The other 72 women ate less protein, and their [pregnancy rate](#) was substantially lower, at 32 percent.

Russell said that, on average, there was no difference between the two groups as far as body-mass index—a measure of weight in relation to height. High body-mass index has been linked to lower IVF success, but Russell said he thinks more attention needs to go toward diet quality, whatever a woman's weight.

Kim Ross, a nutritionist at NYU Fertility Center, said the new results are interesting and underscore the importance of healthy eating for women undergoing [fertility treatment](#).

"But I wouldn't want them to think this means they should load up on animal products," she said.

Ross said it's likely that women who ate a lot of protein and few carbs were eating more "whole foods" and fewer processed foods than other women. The processed foods in the typical American diet—even ones that seem fairly healthy—are often skimpy on nutrients of all kinds, Ross said.

Other research supports the notion that a well-balanced, nutritious diet supports fertility. Recent studies have linked the Mediterranean diet to better odds of conceiving versus the standard Western diet, in both women undergoing IVF or trying the natural way.

The traditional Mediterranean diet is low in red meat, dairy and processed foods, but high in fresh fruits and vegetables, fish, olive oil and whole grains.

Both Ross and Grifo said "good" fats, like those in vegetable oils, plus fruits, vegetables and other healthy carbs, are important for women undergoing IVF—as they are for everyone.

Russell said women at his center are now routinely counseled on nutrition before undergoing IVF. If they are below the 25 percent mark for protein, they get advice on how to add more to their diets and cut out empty carbs.

In counseling women at the NYU center, Ross said she sees where women are starting from, as far as diet and lifestyle, and goes from there. Some women may need more protein, but others may not, she said.

And although the current study focused only on women, Ross said men's nutrition matters in sperm quality, so she gives advice to both women and men ahead of and during infertility treatment.

More information: Learn more about [fertility issues](#) from the U.S. National Institute of Child Health and Human Development.

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