

## Mom's prenatal fish oil might help kids' blood pressure later

February 22 2019

---



(HealthDay)—Obese young children may have less risk for high blood

pressure if their mother took the omega-3 fatty acid DHA—found in fish oil—during pregnancy, new research suggests.

The findings could be important since rising numbers of American [children](#) are obese and experiencing hikes in [blood pressure](#).

That could have long-term consequences for their health, said study co-author Susan Carlson. She's professor of nutrition at the University of Kansas.

"It is known that [blood pressure](#) tracks over time, such that people with higher blood pressure early in life are more likely to have higher blood pressure later in life," she said in a university news release.

The study tracked 171 children born in the Kansas City area. During pregnancy, half of the children's mothers took 600 milligrams a day of DHA (docosahexaenoic acid)—which is found in prenatal vitamins, [fish oil supplements](#) and fish—while the other half took a placebo.

The children's blood pressure was then checked a number of times between the ages of 4 and 6. Among kids who were overweight or obese, higher blood pressure was found in those whose mothers took a placebo during pregnancy, but not in those whose mothers took DHA during pregnancy, the researchers found.

On average, overweight/obese children of mothers in the placebo group had 3.94 mm Hg higher systolic (top number) blood pressure and a 4.97 mm Hg higher diastolic (bottom number) blood pressure than overweight/obese children whose mothers took DHA.

That's a statistically significant difference, the team said. As to how the nutrient might cause this effect, study co-author John Colombo said, "part of DHA's known effects may be in programming cardiac function

that preserves normal blood pressure in the case of high postnatal weight gain." He directs the university's Life Span Institute.

"This research is aimed at expectant mothers and pediatricians who wonder what you can do prior to the birth of your child to optimize health and behavior outcomes," Colombo added.

Many prenatal supplements in the United States contain DHA, but most have much less than 600 milligrams, according to the researchers. They added that the amount of prenatal DHA needed to protect against higher blood pressure in overweight/obese children is not known.

Two specialists dealing with the care of mom and baby agreed that dosage may be key.

"Typically, prenatal vitamins have 200-300 mg of DHA," noted Dr. Jennifer Wu, an obstetrician/gynecologist at Lenox Hill Hospital in New York City. "Since there are other benefits of DHA, such as lowering the risk for preterm birth and increasing lean body mass in children, perhaps larger doses of daily DHA are needed in pregnancy," she said.

Audrey Koltun, a registered dietitian specializing in pediatric endocrinology, agreed.

"Most of the standard [prenatal vitamins](#) do not contain DHA, and those that do have 200-300 mg per dose. Will this quantity have the same results?" wondered Koltun, who practices at Cohen Children's Medical Center in New Hyde Park, N.Y.

She also wondered about the larger consequences of using a supplement to fight health issues tied to obesity.

"The message [could be] that it is OK to have overweight and obese

offspring, because now taking a supplement can prevent elevated blood pressure and possibly other conditions," Koltun said. "Too many times, supplements are recommended instead of eating a balanced [healthy diet](#) for prevention or treatment of nutrition-related medical conditions, including overweight and obesity."

Still, "DHA is already known to help with brain and eye development in babies, so I am glad to read that it also can help to keep blood pressure from increasing," she said.

Koltun said longer-term studies would also be welcome, since many of the more serious health consequences of child obesity only emerge in the teenage years.

Nearly one in five American children aged 6 to 19 are now overweight or obese, according to the U.S. Centers for Disease Control and Prevention.

The study was published online Feb. 22 in *JAMA Network Open*.

**More information:** The U.S. Office of Disease Prevention and Health Promotion offers advice on [children and healthy weight](#).

Copyright © 2019 [HealthDay](#). All rights reserved.

Citation: Mom's prenatal fish oil might help kids' blood pressure later (2019, February 22) retrieved 11 July 2024 from <https://medicalxpress.com/news/2019-02-mom-prenatal-fish-oil-kids.html>

<p>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.</p>
--