

Omega-3 linked with reduced risk for smallest babies

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Omega-3 fatty acids, available in fish oil tablets and naturally occurring in eggs and oily fish, may help babies born small to decrease their risk of cardiovascular disease later in life

(Medical Xpress) -- Omega-3 fatty acids may have a role in preventing heart attack or strokes in adults who were small at birth, according to University of Sydney researchers.

The findings published in [Pediatrics](#), the journal of the American Academy of Pediatrics, suggest the use of supplements for the first five years of a child's life may prevent the development of such life-threatening conditions.

"People who were small at birth have an increased [risk of cardiovascular](#)

[disease](#)," said Dr. Michael Skilton, lead author of the paper, from the University's Boden Institute of Obesity, Nutrition, Exercise and [Eating Disorders](#).

The definition of small at birth applies to the lowest 10% of birth weights of all babies born in Australia each year and no preventative strategy to address their risk has previously been identified.

"The greater degree of risk is partly due to the development, from [early childhood](#), of arterial wall thickening which is an indicator of early [atherosclerosis](#), leading to a build-up of fat and [plaque](#), and hardening of the [blood vessels](#)," Dr. Skilton said.

The study followed the same subjects as those taking part in the [Childhood Asthma Prevention Study](#) - 616 children born at term.

Participants belonged to one of two groups. The omega-3 group received a 500 milligram daily fish oil supplement from the start of bottle-feeding or six months of age until five years of age. They were also supplied with canola-based margarines and cooking oil for the same period.

The control group received a 500 milligram daily sunflower oil supplement from the start of bottle-feeding or from 6 months of age until 5 years of age. They were supplied with omega-6 fatty acid-rich margarines and cooking oil.

At eight-years of age these children were tested for the presence of arterial wall thickening, an indicator of early atherosclerosis associated with later cardiovascular disease.

The children receiving the sunflower supplement had thicker arterial walls if they were small at birth. This was prevented in the children receiving the omega-3 supplement.

"The results of the paper suggest that babies born small may benefit from a daily omega-3 supplement, however further studies are required to confirm this."

Provided by University of Sydney

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