

Mediterranean diet during pregnancy associated with lower risk of accelerated growth

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The Mediterranean diet is characterised by a high content of fruits, vegetables, olive oil, legumes and nuts. This healthy diet pattern has been associated with lower obesity and cardiometabolic risk in adults, but few

studies have focused on children. A new study, published in the *Journal of Pediatrics*, evaluates the association between adherence to a Mediterranean diet during pregnancy with growth patterns and cardiometabolic risk in early infancy.

The study was performed with data from over 2,700 [pregnant women](#) from Asturias, Guipúzcoa, Sabadell and Valencia, who are part of the INMA-Childhood and Environment cohort. The women filled in a questionnaire on dietary intake in the first and third trimester of pregnancy. In addition, the diet, weight and height of their offspring were followed up from birth to age four. Other tests such as blood analysis and blood pressure were also performed at age four.

The results show that pregnant women with higher adherence to the Mediterranean diet had a 32 percent lower risk of having children with an accelerated growth pattern, as compared to offspring of women that did not follow such diet.

Sílvia Fernández, ISGlobal researcher and first author of the study, notes that mothers with lower adherence to the Mediterranean diet were younger, consumed more calories, and had higher probability of smoking and a lower education and social level, as compared to those women who did follow the diet.

"These results support the hypothesis that a healthy diet during pregnancy can have a [beneficial effect](#) for [child development](#)," concludes the study coordinator Dora Romaguera, researcher at ISGlobal and CIBEROBN. Regarding the mechanisms that underlie this association, the researcher mentions "possible epigenetic modifications that regulate foetal cardiometabolism, or shared eating patterns between mothers and children, although this deserves further investigation."

The study did not find a correlation between Mediterranean diet in

pregnancy and a reduction in [cardiometabolic risk](#) (blood pressure or cholesterol) in early infancy. "The effects on cardiometabolic risk could appear later in childhood," explains Fernández.

More information: Sílvia Fernández-Barrés et al, The Association of Mediterranean Diet during Pregnancy with Longitudinal Body Mass Index Trajectories and Cardiometabolic Risk in Early Childhood, *The Journal of Pediatrics* (2018). [DOI: 10.1016/j.jpeds.2018.10.005](https://doi.org/10.1016/j.jpeds.2018.10.005)

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