

# Prenatal lifestyle interventions found to improve child neurodevelopmental outcomes

August 25 2023, by Elana Gotkine

---



Maternal structured lifestyle interventions during pregnancy based on a

Mediterranean diet or mindfulness-based stress reduction (MBSR) improve child neurodevelopmental outcomes at age 2 years, according to a study published online on Aug. 22 in *JAMA Network Open*.

Francesca Crovetto, M.D., Ph.D., from the University of Barcelona in Spain, and colleagues examined whether structured interventions based on a Mediterranean diet or MBSR during pregnancy improve child neurodevelopment at age 2 years in a prespecified analysis of a parallel-group randomized clinical trial.

A total of 1,221 singleton pregnancies with a high risk for developing newborns who were small for gestational age were randomly assigned to a Mediterranean diet intervention, including educational sessions and free provision of extra virgin [olive oil](#) and walnuts; an MBSR program adapted for pregnancy; or usual care per institutional protocols.

Neurodevelopment was assessed in 626 children at a mean age of 24.8 months. The researchers found that children in the Mediterranean diet group had higher scores in the cognitive and social-emotional domains than children from the usual care group ( $\beta$ , 5.02 and 5.15, respectively), while children from the stress reduction group had higher scores in the social-emotional domain ( $\beta$ , 4.75).

"These results need replication in further randomized [clinical trials](#) as well as assessment in additional patient populations," the authors write.

Several authors disclosed ties to the pharmaceutical, nutrition, and other industries.

**More information:** Francesca Crovetto et al, Effect of a Mediterranean Diet or Mindfulness-Based Stress Reduction During Pregnancy on Child Neurodevelopment, *JAMA Network Open* (2023). [DOI: 10.1001/jamanetworkopen.2023.30255](https://doi.org/10.1001/jamanetworkopen.2023.30255)

Copyright © 2023 [HealthDay](#). All rights reserved.

Citation: Prenatal lifestyle interventions found to improve child neurodevelopmental outcomes (2023, August 25) retrieved 13 May 2024 from <https://medicalxpress.com/news/2023-08-prenatal-lifestyle-interventions-child-neurodevelopmental.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>
--