

Grandmaternal DDT exposure tied to granddaughter early menarche, obesity

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(HealthDay)—Grandmaternal perinatal serum

dichlorodiphenyltrichloroethane (DDT) is associated with granddaughter adult obesity and early menarche, according to a study published online April 14 in *Cancer Epidemiology, Biomarkers & Prevention*.

Piera M. Cirillo, M.P.H., from the Child Health and Development Studies of the Public Health Institute in Berkeley, California, and colleagues examined founding-generation (F0) perinatal serum DDT associations with granddaughters' (F2) measured obesity at a median age of 26 years and self-reported age at [menarche](#). Data were included for 258 triads for the obesity analyses and 235 triads for the early menarche analyses. 1,1,1-trichloro2,2-bis(p-chlorophenyl) ethane (*p,p'*-DDT) and 1,1,1-trichloro2-(o-chlorophenyl)-2-(p-chlorophenyl)ethane (*o,p'*-DDT) were measured in archived F0 perinatal serum; the associations with F2 outcomes were examined after accounting for characteristics of adult daughters (F1) of F0.

According to the researchers, among normal-weight F0, there was an association observed for F0 *o,p'*-DDT with F2 [obesity](#) (odds ratio, 2.6 for tertile 3 versus 1), independent of other DDTs; this finding was not seen among overweight and obese F0. There was also an association noted for F0 *o,p'*-DDT with F2 early menarche (odds ratio, 2.1 for tertile 3 versus 1), which was not modified by F0 body mass index.

"In combination with our on-going studies of DDT effects in the grandmother's and mother's generations, our work suggests we should take precautionary action on the use of other endocrine disrupting chemicals, given their potential to affect generations to come in ways we cannot anticipate today," a coauthor said in a statement.

More information: [Abstract/Full Text \(subscription or payment may be required\)](#)

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