

# Cadmium linked to plaque development in older women

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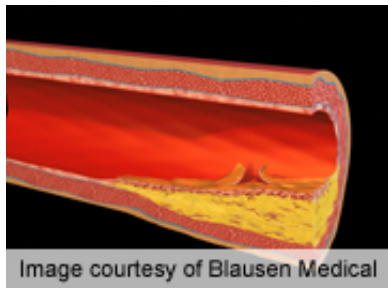


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Cadmium levels in blood and urine are independently associated with the development of atherosclerotic plaques in older women, according to a study published online July 20 in the *Journal of Internal Medicine*.

(HealthDay) -- Cadmium levels in blood and urine are independently associated with the development of atherosclerotic plaques in older women, according to a study published online July 20 in the *Journal of Internal Medicine*.

Björn Fagerberg, M.D., Ph.D., from the Sahlgrenska University Hospital in Gothenburg, Sweden, and colleagues analyzed data from a screening-based cohort involving 599 64-year-old Caucasian women. Participants were stratified into groups with normal glucose tolerance, impaired glucose tolerance, and diabetes. Cadmium concentrations were measured in blood and urine at baseline, and ultrasound was performed to determine the prevalence and area of [atherosclerotic plaques](#) in the carotid arteries.

The researchers found that, at baseline, after adjustment for confounders, blood cadmium levels correlated with increased risk of plaque and a large plaque area. Blood cadmium levels correlated positively with plaque area at baseline for women who had never smoked. After adjustment for confounders, at follow-up, the occurrence of large plaques and the change in plaque area correlated with blood and creatinine-corrected urinary

cadmium concentrations at baseline. Blood and urine cadmium levels provided additional information to established cardiovascular risk factors for predicting the progress of atherosclerosis.

"In conclusion, we have shown that cadmium exposure is an independent factor related to the development of atherosclerotic plaques both at baseline and at follow-up in a cohort of 64-year-old women with varying degrees of [glucose tolerance](#)," the authors write. "From a public health perspective, it is important to determine the role of cadmium exposure as a causal factor in cardiovascular disease."

The study was funded in part by AstraZeneca.

**More information:** [Abstract](#)  
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