Negative link seen for oxidative balance score with chronic kidney disease

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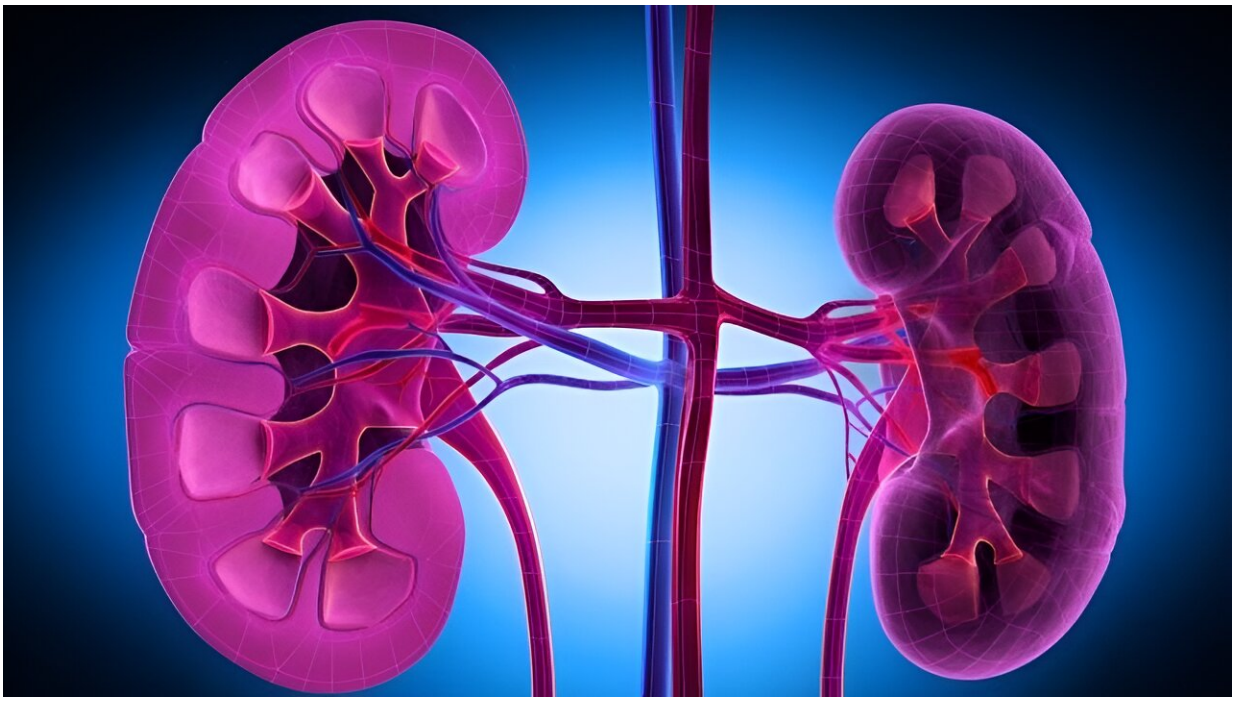

There is a negative association for oxidative balance score (OBS) with chronic kidney disease, according to a study published online April 23 in *Frontiers in Nutrition*.

Yuyu Cao, from the Seventh Clinical Medical College at the Guangzhou University of Chinese Medicine in Shenzhen, China, and colleagues examined the association between OBS, which reflects systemic stress status and includes 16 anti- and pro-oxidant dietary factors and four anti- and pro-oxidant lifestyle factors, and CKD among 8,134 study participants from the 2011 to 2018 National Health and Nutrition Examination Survey.

The researchers observed a negative association between OBS and CKD (odds ratio, 0.54). For each unit increase in OBS, the prevalence of CKD was reduced by 42 percent when dietary OBS was >20 and after adjustment for all confounders.

In the female group, the negative associations of total OBS, dietary OBS, and lifestyle OBS with CKD were more significant. The trend of decreasing prevalence in the female group was more significant when the total OBS was about 20.

"Because our study had a cross-sectional design, we could not establish a causal relationship between OBS and CKD; therefore, more prospectively designed studies are needed to demonstrate the effectiveness of OBS," the authors write. "Nevertheless, our study findings, which revealed a negative association between OBS and CKD, have clinical relevance."

More information: Yuyu Cao et al, Association between oxidative balance score in adults with and without chronic kidney disease: 2011–2028 NHANES, *Frontiers in Nutrition* (2024). DOI: 10.3389/fnut.2024.1374719