

Reducing salt intake may help protect kidney patients' heart and kidney health

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New research indicates that reducing sodium intake may provide kidney and heart benefits for patients with chronic kidney disease (CKD). The findings appear in an upcoming issue of the *Journal of the American Society of Nephrology (JASN)*.

Urinary excretion of proteins, including albumin, is a hallmark of CKD. Therapies that reduce such albuminuria can slow kidney function decline and also have beneficial effects on the heart and blood vessels. Unfortunately, currently available therapies do not eliminate albuminuria in many patients, leaving these individuals with what is known as residual albuminuria.

A team led by Martin de Borst, MD, PhD (University Medical Center Groningen, in The Netherlands) studied 2 interventions that have demonstrated potential for reducing residual albuminuria: dietary sodium restriction and a drug (paricalcitol) that activates the vitamin D receptor. In a randomized trial that included 45 patients with CKD, each intervention was added to an optimized conventional treatment regimen during four 8-week periods.

The investigators found that dietary sodium restriction led to a significant reduction of residual albuminuria and [blood pressure](#), whereas paricalcitol had no significant effect on these measures. The combination of paricalcitol and a [low sodium diet](#), however, resulted in the lowest albuminuria levels.

"What we found was that sodium restriction provided a relatively large beneficial effect, whereas the effect of paricalcitol was small. Thus, the impact of the combined intervention was largely due to the protective effect of sodium restriction," said Dr. de Borst.

Most people consume twice as much sodium as the 2 grams per day recommended by the World

Health Association. "In our study, patients consumed on average 4 grams of sodium per day, which is well in line with global trends in sodium consumption among CKD patients," said Dr. de Borst. "Interestingly, following our intervention aimed at reduced [sodium intake](#), [patients](#) consumed 2.5 grams per day, which is still above the recommended level. This moderate restriction resulted in a strong reduction in albuminuria and blood pressure, indicating that even a moderate reduction in [sodium](#) intake may provide serious health benefits."

More information: "The effect of vitamin D receptor activation and dietary sodium restriction on residual albuminuria in chronic kidney disease: the ViRTUE-CKD randomized controlled trial," [DOI: 10.1681/ASN.2016040407](https://doi.org/10.1681/ASN.2016040407).

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