

Indigestion remedy slows kidney function decline and improves survival in late-stage CKD

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As chronic kidney disease (CKD) progresses, the kidneys become less able to maintain a healthy balance of acids in the body. To maintain healthy acid levels, people with CKD are treated with alkaline substances such as sodium bicarbonate, also commonly used to neutralize heartburn and indigestion. The UBI study shows that sodium bicarbonate halves the risk of kidney disease progression, the likelihood of needing dialysis or transplantation) and overall mortality in people with CKD.

Defined as serum bicarbonate less than 22 mmol/L, metabolic acidosis is common in people with CKD stages 4-5 (eGFR insulin resistance, high cholesterol (hyperlipidaemia), and with a more [rapid decline](#) in [kidney function](#)—shown by rising blood creatinine—and increased risk of death.

International guidelines recommend that, when serum bicarbonate concentration falls below 22 mmol/l, CKD patients should be treated with oral sodium bicarbonate to maintain serum bicarbonate within the normal range, unless contraindicated. However, until recently, very few studies have tested the effectiveness of bicarbonate therapy in improving metabolic acidosis or its [potential benefits](#) in patients with CKD.

Results of the UBI trial announced for the first time during the ERA-EDTA Congress in Budapest, now provide strong evidence for the benefits of correcting metabolic acidosis with sodium bicarbonate in

people with late-stage CKD.

The prospective, open-label, randomized controlled trial assigned 740 patients with CKD-3b and CKD stage 4 to either sodium bicarbonate (376 patients) or standard care without sodium bicarbonate (364 patients). The patients had a mean age of 67.8 years, creatinine clearance 30 ml/min, and serum bicarbonate 21.5 mmol/l. At the end of three years, doubling of creatinine occurred in significantly fewer patients randomized to sodium bicarbonate: 6.6% versus 17.0% receiving standard care, p

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