

SPHTM research shows correlation between salt intake and kidney disease

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David Gladow dgladow@tulane.edu

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Excess salt is associated with chronic kidney disease. (Getty Images)

High levels of salt in the diet can have a strong negative impact on a person's health. From [higher risk of Type-2 diabetes](#) to [increased heart disease risk](#) to [shorter life expectancy in general](#), the negative health consequences of high salt consumption are well established.

Now, new research from the [Tulane School of Public Health and Tropical Medicine](#) has revealed that kidney health can also be negatively affected by too much sodium.

In “Self-Reported Frequency of Adding Salt to Food and Risk of Incident Chronic Kidney Disease,” [published on JAMA Network Open](#), Tulane researchers found a higher self-reported frequency of adding salt to foods is significantly associated with an increased risk of chronic kidney disease (CKD).

The study utilized a United Kingdom-based cohort of over 460,000 participants (male and female, aged 37 to 73) to reach its conclusions, which included correlations of higher BMI and higher [Townsend Deprivations Index](#) scores as well.

Under the tutelage of [Department of Epidemiology](#) Interim Chair Dr. [Lu Qi](#), doctoral student Rui Tang was the first author of the study and led the analysis of the data and manuscript writing.

Tang’s interest in the impact of dietary habits on health inspired the work.

“The intricate and conflicting relationship between salt intake and CKD, especially in a general population, was underexplored,” Tang said. “Recognizing the global prevalence of high salt consumption and its potential health implications, I was drawn to investigate this area further.”

The idea to look at this particular connection – between salt and kidney health – stemmed from previous findings linking high salt intake with cardiovascular diseases and other health issues.

“We noted a gap in research regarding salt intake and CKD in the general population, particularly focusing on the habit of adding salt to foods (long-term sodium intake) rather than just dietary intake,” Tang said. “Utilizing the extensive UK Biobank data, we had a unique opportunity to explore this association in depth.”

Tang is excited that the work can now find a wider audience.

“Having our work published in the prestigious journal: *JAMA Network Open* is incredibly rewarding. It's a validation of our team's dedication and hard work. More importantly, this publication offers a platform to highlight the potential public health implications of our findings. It's gratifying to contribute to research that could inform dietary guidelines and potentially reduce CKD risk on a population level.”