

# At risk for kidney disease? Check your genes

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Genetic differences can influence one's risk of developing proteinuria, a condition that increases the risk of cardiovascular disease and chronic kidney disease (CKD), according to a study appearing in an upcoming issue of the *Journal of the American Society of Nephrology (JASN)*. The results may be important for determining patients' health risks and for devising new medical treatments.

Approximately 12% of people in the United States have proteinuria (abnormal levels of protein lost in the urine), and African Americans and American Indians have higher risks of developing the condition than other groups. Researchers suspect that [genetic variation](#) likely accounts for part of their increased risks.

Amy Mottl, MD (University of North Carolina [Kidney Center](#)), and her colleagues looked to see if they could identify the genetic causes of American Indians' increased risk for proteinuria. They studied approximately 3,500 individuals from 13 American Indian tribes enrolled in the Strong Heart Family Study funded by the National Heart, Lung and Blood Institute. The investigators found multiple chromosomal regions that may possess [genes](#) that influence variation in proteinuria, especially in the setting of diabetes or hypertension.

The study's findings are preliminary and additional research is needed to determine which genes influence one's proteinuria risk. "Further exploration of the candidate genes underlying the chromosomes implicated in our study is warranted," the authors wrote. This could lead to a better understanding of how proteinuria arises and to the

development of new strategies for prevention and treatment.

While this study focused on American Indians, its findings likely apply to the general population as well, where the prevalence of proteinuria is rising.

More information: The article, entitled "Linkage Analysis of Albuminuria," will appear online at [jasn.asnjournals.org/](http://jasn.asnjournals.org/) on April 15, 2009, doi 10.1681/ASN.2008080895.

Source: American Society of Nephrology ([news](#) : [web](#))

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