

essentials of health

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New research has shown a significant link between vitamin D status and the risk of advanced kidney disease. In a recent study, individuals with the lowest level of vitamin D were 2.6 times more likely to need kidney dialysis than those with the highest levels.

LOW VITAMIN D MAY ACCOUNT FOR OVER ½ OF END-STAGE RENAL DISEASE IN AFRICAN AMERICANS

Kidney failure is more common in African Americans than in Caucasians. This disparity is generally attributable to a greater prevalence of hypertension and diabetes in this population.

In the December 2009 issue of the Journal of the American Society of Nephrology, researchers report a strong association between end-stage renal disease (ESRD) in Africa Americans and reduced vitamin D levels. Vitamin D deficiencies are more common in this group compared to Caucasians due to increased skin pigmentation, which results in reduced vitamin D synthesis from sun exposure.

Deficiencies in vitamin D (defined as <15 ng/ml) were found in 34% of African Americans compared to 5% of non-Hispanic Caucasians. Researchers also discovered that individuals with the lowest vitamin D levels were 2.6 times as likely to end up on dialysis compared to those with the highest levels. The researchers determined that vitamin D was responsible for about 58% of the excess risk for renal disease experienced by African Americans.

Follow-up research is needed to confirm the results, but this study adds to previous evidence linking vitamin D deficiency to the progression of kidney disease and the resulting need for dialysis. It also explains a good portion of the increased risk of ESRD in African Americans.

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