Diet Quality Affects Risk of eGFR Decline in Urban Patients

In a diverse urban population, low dietary quality was associated with increased risk of declining kidney function among adults with hypertension, reports a study in the Journal of Renal Nutrition.

The study included data on 1554 participants in the “Healthy Aging to Neighborhoods of Diversity across the Life Span” (HANDLS) study. African Americans and whites, aged 30 to 64 years, with a baseline estimated glomerular filtration rate (eGFR) of 60 mL/min/1.73 m² or higher were age 48 years; 59% of participants were African American.

A Dietary Approaches to Stop Hypertension (DASH) score, based on nine target nutrients, was calculated for each participant. Dier score was evaluated for association with rapid decline in kidney function (greater than 3 mL/min/1.73 m² per year), incident chronic kidney disease, and eGFR decline greater than 25%.

Accordance with the DASH diet was “moderate” (median score 1.5 or 50% of scale). At a median 5 years’ follow-up, rapid eGFR decline occurred in 13.4% of patients overall, 15.2% of those with a DASH score of 1 or less, and 12.0% with a DASH score greater than 1. On adjusted analysis, the association with rapid eGFR decline was significant only for subjects with hypertension: risk ratio 1.68. The DASH score was unrelated to incident chronic kidney disease or eGFR decline greater than 25%.

Previous studies have linked a healthier diet to a lower risk of kidney disease outcomes, but none of these studies have focused on urban populations. The new results show that a low DASH score is associated with an increased risk of rapid decline in eGFR, among urban adults with hypertension. The investigators conclude: “[D]iet quality may play an important role in determining kidney outcomes among individuals with risk factors for CKD” (Liu Y, et al. Dietary habits and risk of kidney function decline in an urban population. J Renal Neurol 2017; 27: 6-23).