

**Abstract Submission No.: A-0917**

**Association between Healthy Dietary Patterns and Chronic Kidney Disease:  
Findings from the Korean National Health and Nutrition Examination Survey  
(KNHANES) 2019-2021**

**Minsang Kim**<sup>1</sup>, Kyungdo Han<sup>2</sup>, Sehoon Park<sup>1</sup>, Jin Hyuk Paek<sup>3</sup>, Woo Yeong Park<sup>3</sup>, Kyubok Jin<sup>3</sup>,  
Seungyeup Han<sup>3</sup>, Dong Ki Kim<sup>1</sup>, Yaerim Kim<sup>3</sup>

<sup>1</sup>Department of Internal Medicine, Seoul National University Hospital, Korea, Republic of

<sup>2</sup>Department of Department of Statistics and Actuarial Science, Soongsil University, Korea, Republic of

<sup>3</sup>Department of Internal Medicine, Keimyung University School of Medicine, Korea, Republic of

**Objectives :** A healthy dietary pattern is linked to a lower risk of developing chronic kidney disease (CKD) and its progression. Considering the different dietary pattern by country, we aim to evaluate the impact of dietary pattern on the risk of incident CKD using the Korean Healthy Eating Index (KHEI), a tool designed to assess diet quality in Koreans.

**Methods :** In this cross-sectional study, we included participants  $\geq 19$  years-old in the eighth Korean national health and nutrition examination survey conducted from 2019 to 2021. The KHEI consists of 3 categories and 14 components (eight for adequacy, three for moderation, three for balance), with a higher KHEI indicating healthier eating habits. CKD was defined as an estimated glomerular filtration rate  $< 60$  mL/min/1.73m<sup>2</sup> or urine albumin-creatinine ratio  $\geq 30$  mg/g. The risk of CKD was evaluated according to the quartiles of the KHEI using logistic regression analysis, adjusted for various clinicodemographic characteristics.

**Results :** In total, 12,454 participants were included in this study. Those in the higher quartile of the KHEI were older, had lower proportions of men, current smoker, and heavy alcohol drinker. Although there were higher proportion of CKD or lower eGFR in the highest quartile of KHEI, adjusted mean of KHEI was lower in participants with CKD. Among the subcategories of KHEI, there was no difference in moderation or energy balance, but the score of most components in adequacy category were higher in participants with CKD (Figure 1). Participants in the highest quartile of KHEI had a significantly lower risk of CKD (adjusted odds ratio, 0.75 [0.60–0.95]) compared to those in the lowest quartile (Table 1).

**Conclusions :** The dietary pattern representing KHEI is associated with various characteristics including comorbidities. A greater KHEI decreased risk of incident CKD, and healthy eating pattern would be suggested especially in participants with a risk of CKD.

Figure1.jpg

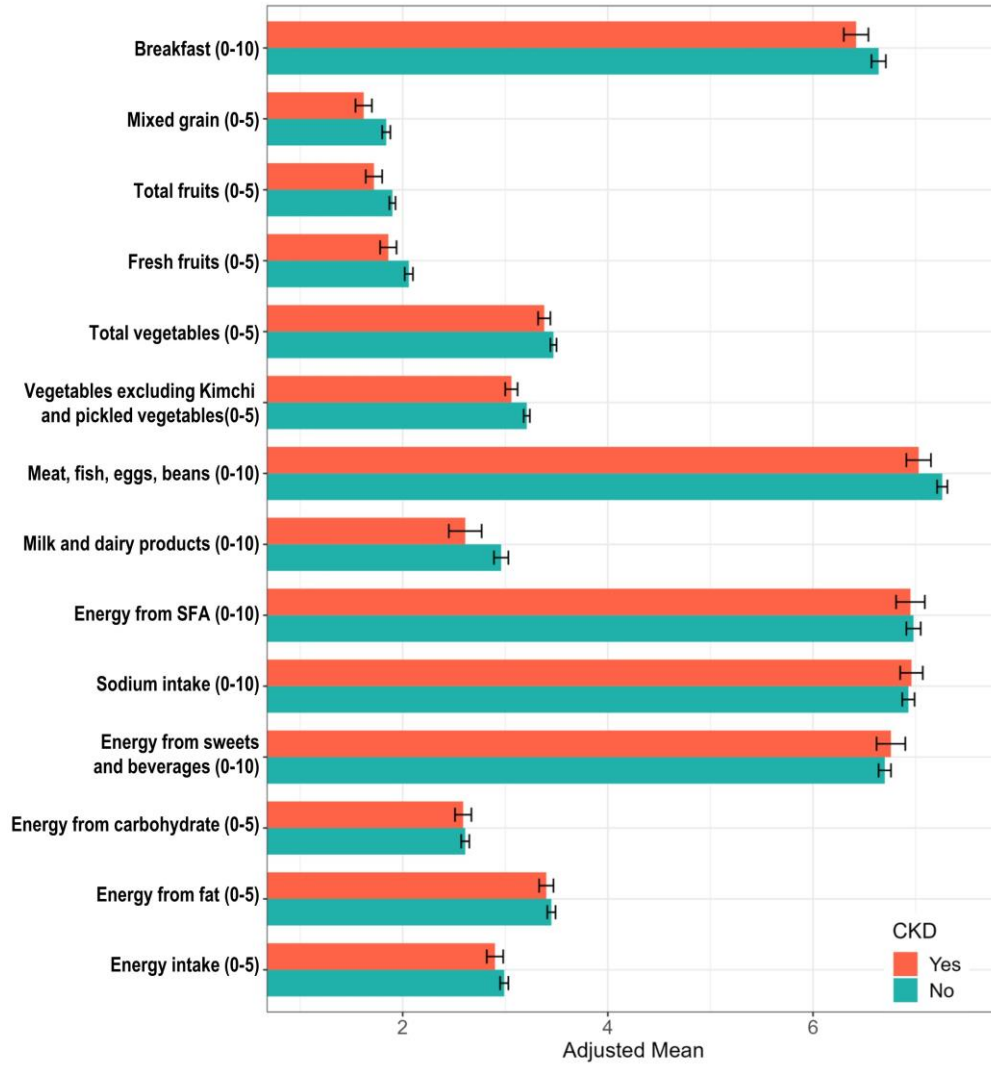


Figure1.jpg

		KHEI				P-value
		Q1	Q2	Q3	Q4	
CKD prevalence, % (SE)		7.27 (0.52)	8.89 (0.60)	9.21 (0.61)	11.15 (0.65)	
Odds ratio (95% CI)	Unadjusted	1 (Reference)	1.243 (1.008, 1.532)	1.293 (1.055, 1.585)	1.600 (1.314, 1.949)	<0.001
	Age, sex adjusted	1 (Reference)	0.858 (0.685, 1.073)	0.707 (0.570, 0.876)	0.669 (0.541, 0.829)	<0.001
	Model 1	1 (Reference)	0.870 (0.688, 1.101)	0.715 (0.572, 0.895)	0.694 (0.556, 0.867)	0.003
	Model 2	1 (Reference)	0.902 (0.711, 1.145)	0.772 (0.617, 0.967)	0.754 (0.599, 0.948)	0.045