

**Abstract Type : Oral**

**Abstract Submission No. : OR-1341**

## **Dairy Intake and Incident Chronic Kidney Disease in Hypertensive Patients: A Community-Based Prospective Cohort Study**

**Jong Hyun Jhee**<sup>1</sup>, Seung Hyeok Han<sup>2</sup>

<sup>1</sup>Department of Internal Medicine-Nephrology, Inha University Hospital, Korea, Republic of

<sup>2</sup>Department of Internal Medicine-Nephrology, Severance Hospital, Korea, Republic of

**Objectives:** Several studies have suggested beneficial effects of habitual consumption of dairy foods against cardiovascular events and chronic kidney disease (CKD). However, the association between this dietary pattern and incident chronic kidney disease (CKD) in the hypertensive patients is unknown.

**Methods:** Using the Korean Genome and Epidemiology Study, a community-based prospective cohort study, we analyzed 3,255 hypertensive subjects with normal renal function. These subjects were classified into 4 groups according to consumption of dairy foods based on a validated semiquantitative food-frequency questionnaire: never, <1, 1, and  $\geq 2$  servings per day. The primary outcome was incident CKD (estimated glomerular filtration rate  $< 60$  mL/min/1.73 m<sup>2</sup>).

**Results:** Mean age of study subjects were  $55.2 \pm 8.9$  years and 1,603 (49.2%) were female. During a mean follow-up of 7.8 years, 811 (24.9%) subjects developed incident CKD. Compared with never-consumers, incident CKD occurred less in dairy food consumers with  $\geq 2$  servings per day (28.4% vs. 22.2%,  $P = 0.003$ ). In a multivariable Cox proportional hazard model, consumption of  $\geq 2$  servings per day was associated with a 20% lower risk of incident CKD than never-consumers. Among types of dairy foods, milk consumption of one and  $\geq 2$  servings per day was associated with 13% and 27% lower risk of CKD, respectively. However, consumption of yogurt, cheese, or butter did not show association with the risk of CKD development. In subgroup analysis, the beneficial association of dairy food consumption on incident CKD was particularly evident in female and diabetes subjects.

**Conclusions:** A habitual consumption of dairy food may have a beneficial association with the prevention of kidney disease in hypertensive patients.