

리보플라빈 섭취와 만성콩팥병 및 대사증후군과의 관계

영남대학교병원 신장내과

강석희, 최은우, 조규향, 박종원, 도준영

Dietary Riboflavin Intake Correlates with Chronic Kidney Disease and Metabolic Syndrome

Seok Hui Kang, Eun Woo Choi, Kyu Hyang Cho, Jong Won Park, Jun Young Do

Internal Medicine, Yeungnam University Hospital

Background: The aim of the present study therefore was to determine whether dietary riboflavin intake is associated with chronic kidney disease (CKD) and/or metabolic disturbances in the general population.

Patients and Methods: Overall, 47,912 participants were included in this study. Participants were divided into 4 groups according to their dietary riboflavin intake quartile: the first quartile (Q1), second quartile (Q2), third quartile (Q3), and fourth quartile (Q4).

Results: The proportion of participants who were men, the high-density lipoprotein cholesterol level, and the estimated glomerular filtration rate increased from the Q1 to the Q4. In contrast, the prevalence of diabetes mellitus, hypertension, non-smoking status, non-heavy alcohol consumption, metabolic syndrome (MS), and CKD decreased from the Q1 to the Q4. In univariate analysis, compared with participants in the Q4, those in the Q1, Q2, and Q3 had a 1.906-fold, 1.361-fold, and 1.066-fold increased risk of MS, respectively; a 3.401-fold, 1.802-fold, and 1.381-fold increased risk of CKD, respectively; and a 3.231-fold, 1.962-fold, and 1.450-fold increased risk of cardiovascular disease (CVD), respectively. The same trend was seen also in multivariate analysis.

Conclusion: Low dietary riboflavin intake is associated with the prevalence of MS, CKD, and CVD. Adequate riboflavin supplements may help prevent the development of MS, CKD, and CVD in patients with suboptimal riboflavin intake.

Key Words: 리보플라빈, 만성콩팥병, 심혈관계 질환

Riboflavin, Chronic kidney disease, Cardiovascular disease