Abstract for Baltic Nephrology Conference 2024

„Results of NATRIJOD study: what of it for the kidneys?“

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Objective: The importance of high-sodium and low-potassium consumption for cardiovascular morbidity and mortality is widely known; furthermore, the reno-protective effect of low-salt and increased potassium intake has been reported. The aim of this study was to evaluate mean intake of sodium and potassium by 24-hour urinary electrolyte excretion and correlations with albuminuria in Lithuanian population.

Design and method: 1034 healthy individuals aged 18-69 years participated in the national NATRIJOD study. Sodium, potassium, sodium-to-potassium ratio and albumin excretion were assessed from 24-hour urine samples. Participants were divided into two groups according to the presence of albuminuria (albumin excretion ≥30mg/24-hour).

Results: 888 individuals were included in a final analysis. An average age was 47.4 years and 52.48% were women. Mean sodium consumption was 162.4±86 mmol/24-hour and mean potassium consumption was 73.8±29.6 mmol/24-hour. Average albumin excretion rate was 10 mg/24-hour and the proportion of albuminuria was found 3.37 %. Individuals with present albuminuria had significantly higher sodium excretion and higher sodium-to-potassium ratio compared with normoalbuminuric group: 203.7±108.3mmol/24-hour vs. 161.0±84.9mmol/24-hour ($p<0.01$) and 2.9±1.2 vs. 2.3±1.7 ($p=0.02$). Higher quintiles of sodium excretion were associated with increased albuminuria. The correlation coefficient between albuminuria and sodium excretion was 0.09, while the correlation coefficient for the association between albuminuria and potassium excretion was 0.05.

Conclusions: In Lithuania salt intake significantly exceeds recommended levels, whereas potassium consumption remains insufficient. 3.37 % of participants had albuminuria; this group displayed higher sodium excretion rate and higher sodium-to-potassium ratio. Weak correlations were identified between albuminuria and both sodium excretion and potassium excretion.