Lecture Code : JS11-S2
Session Name : KSN-KSCN Joint Symposium (Korean Society of Clinical Nutrition)
Session Topic : -
Date & Time, Place : June 21 (Sat) / 15:10-17:10 / Room 4 (Room 203)

Barriers to Implementing the Mediterranean Diet in CKD Patients?

Ga Young Heo
Korea University Anam Hospital, Republic of Korea

The Mediterranean diet (MD), characterized by high consumption of plant-based foods, monounsaturated fats from olive oil, and moderate consumption of fish and poultry. As it is widely recognized for its cardiovascular and metabolic benefits, it has emerged as a promising nutritional strategy for patients with chronic kidney disease (CKD). However, implementing MD in this population remains challenging and requires disease-specific adaptations. A key concern is hyperkalemia, as MD emphasizes potassium-rich foods such as fruits, vegetables, and legumes. In CKD and especially in end-stage kidney disease (ESKD), impaired renal potassium excretion increases the risk of hyperkalemia, which increased the risk of serious cardiac arrhythmias. While plant-based potassium may be less bioavailable, total potassium intake remains significant, necessitating close monitoring and dietary adjustments. Phosphorus management is another issue. Whole grains, nuts, and legumes can contribute to hyperphosphatemia in ESKD, elevating the risk of vascular calcification and mortality. Although plant-based phosphorus is also less absorbable than inorganic forms, the overall phosphorus load remains high. Phosphate binders and food selection strategies are essential. Sodium intake must also be carefully regulated. While the traditional MD is generally low in sodium, certain components—such as salt-cured fish, olives, and cheeses—may inadvertently increase sodium consumption. In ESKD patients, excess sodium intake is linked to fluid overload, worsened hypertension, and heightened risk of heart failure, making it essential to minimize processed foods and strictly limit sodium intake. Lastly, ESKD patients on dialysis require higher protein intake (≥1.2 g/kg/day) due to dialysis-related losses and the risk of protein-energy wasting. The MD typically provides moderate protein, mainly from plant sources, which may be insufficient for ESKD patients. Therefore, the diet should be tailored to include high-quality protein sources such as fish, poultry, eggs, and low-phosphorus dairy products. In conclusion, the Mediterranean diet holds significant potential as a dietary intervention for CKD and ESKD management. However, a personalized and multidisciplinary approach that accounts for

potassium, phosphorus, sodium, protein, and energy balance is essential to ensure safe and effective implementation. Collaboration between nephrologists and dietitians is critical to optimize outcomes in this population.

Keywords: Chronic kidney disease , Mediterranean diet, Hyperkalemia, Phosphorus, Protein