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**Lower energy intake predicts 10-year mortality in patients with end-stage renal disease on hemodialysis**

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Protein-energy wasting (PEW) is associated with mortality in patients with end-stage renal disease (ESRD) on maintenance hemodialysis. The correct diagnosis of PEW is extremely important in order to predict clinical outcomes. However, it is unclear which parameters should be used to diagnose PEW. Therefore, this retrospective observational study investigated the relationship between mortality and nutritional parameters in ESRD patients on maintenance hemodialysis. A total of 144 patients were enrolled. Nutritional parameters, including body mass index, serum albumin, dietary intake, normalized protein catabolic rate (nPCR), and malnutrition inflammation score (MIS), were measured at baseline. 53 patients died during the study. Survivors had significantly higher nPCR ( $1.10 \pm 0.24$  g/kg/day vs.  $1.01 \pm 0.21$  g/kg/day;  $p=0.048$ ), energy intake ( $26.7 \pm 5.8$  kcal/kg vs.  $24.3 \pm 4.2$  kcal/kg;  $p=0.009$ ) and protein intake ( $0.91 \pm 0.21$  g/kg vs.  $0.82 \pm 0.24$  g/kg;  $p=0.020$ ), and lower MIS ( $5.2 \pm 2.3$  vs.  $6.1 \pm 2.1$ ,  $p=0.039$ ). In multivariable analysis, energy intake  $< 25$  kcal/kg (HR 1.860, 95% CI 1.018–3.399;  $p=0.044$ ) and MIS  $> 5$  (HR 2.146, 95% CI 1.173–3.928;  $p=0.013$ ) were independent variables associated with all-cause mortality. These results suggest that higher MIS and lower energy intake are harmful to ESRD patients on maintenance hemodialysis. Optimal energy intake could reduce mortality in these patients.

**Biography**

Yongsoon Park had completed her PhD from Washington State University and Postdoctoral studies from Mayo Clinic. She is a Professor at Hanyang University, Seoul, Korea. She has published more than 110 papers in reputed journals and has been serving as an Editorial Board Member of *Journal of Medicinal Food*, *Journal of nutrition and Practice*, *Korean Journal of Medicinal Crop Science*, and *Korean Journal of Obesity*.

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