

INTRODUCTION: Clinical practice guidelines on dietary intake in patients treated with haemodialysis focus on restricting individual nutrients to avoid electrolyte complications. Evidence for whole dietary patterns and their association with clinical outcomes is of very low certainty due to sparse existing data. We aimed to evaluate the association of data driven dietary patterns with cardiovascular and all-cause mortality among adults treated with hemodialysis.

METHODS: In the DIET-HD multinational cohort study, dietary composition of over 200 foods was ascertained using the GA2LEN food frequency questionnaire in 8110 adults treated with haemodialysis. In this analysis, dietary patterns were identified using principal components analysis. Participants received a score for each identified pattern with higher scores indicating closer resemblance of their diet to the identified pattern. The association of dietary pattern scores (as quartiles) with all-cause and cardiovascular mortality was estimated using Cox regression analyses, clustered by country and adjusted for comorbidity, demographic and life style characteristics. Estimates are presented as adjusted hazard ratios (aHR) with 95% confidence intervals (CI), using the lowest quartile score as the reference category.

RESULTS: During a median follow up of 2.7 years (18,666 person-years), there were 2087 deaths (958 cardiovascular). Two dietary patterns, “fruit and vegetables-based” and “Western”, were identified by principal components analysis. The main food components of each dietary patient is shown in Figure 1. There was no evidence of an association of increasing concordance with the fruit and vegetable dietary pattern and cardiovascular mortality (aHR 0.94 (CI, 0.76-1.15), 0.83 (0.66-1.06) and 0.91 (0.69-1.21) for ascending score quartiles) or all-cause mortality (0.95 (0.83-1.09), 0.84 (0.71-0.99) and 0.87 (0.72-1.05)). Similarly there was no evidence of an association between a Western dietary pattern in ascending quartiles of dietary concordance and cardiovascular mortality (aHR 1.01 1.10 (0.90-1.35), 1.11 (0.87-1.41) and 1.09 (0.80-1.49) or all-cause mortality (1.01 (0.88-1.16), 1.00 (0.85-1.18) and 1.14 (0.93-1.41)).

CONCLUSIONS: There appears to be little or no association between consumption of a fruit and vegetable-based or a Western diet with cardiovascular and all-cause mortality in patients on hemodialysis.

FC061 **DIETARY PATTERNS AND MORTALITY IN ADULTS ON HEMODIALYSIS**

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