

(\$3,760 vs \$9,565; $p<0.001$) and other (\$13,624 vs \$95,162; $p<0.001$) compared to STD-TF.

Conclusion: The use of CBTF containing a variety of real food was associated with significant reductions in HCRU and costs compared to STD-TF demonstrating health economic benefits in reducing the burden of post-acute care patients and healthcare system.

References:

1. Elfadil OM et al. *JPEN*. 2021;1:9.

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LB-23

EFFECT OF THE MEDITERRANEAN DIET ON FECAL BILE ACIDS AND FECAL LONG-CHAIN FATTY ACIDS (LIBRE STUDY)

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Rationale: Adherence to the Mediterranean diet (MedD) reduces the risk of breast cancer, yet the underlying mechanisms are largely unknown. LIBRE, a randomized controlled trial [1], assesses the effect of the MedD on breast cancer in an at-risk population. Here, we assess possible effects of the MedD on fecal bile acids (BAs) and fecal long-chain fatty acids (LCFAs), which are associated with cancer development.

Methods: 87 women were randomized to the intervention group (IG, $n=45$, repeated training on the MedD), or the control group (CG, $n=42$, lectured once on a standard healthy diet). Adherence to the MedD was assessed by the MedD Adherence Screener score (MEDAS) and the MedD-Score [2] at baseline (BL) and after 3 and 12 months (V1, V2). Fecal BAs were analyzed by mass spectrometry/HPLC; fecal LCFAs were analyzed by gas chromatography. Statistics: Wilcoxon tests, Spearman correlations.

Results: Adherence to the MedD increased markedly in the IG (MEDAS: BL-V1 +31%, BL-V2 +31%; MedD-Score: BL-V1 +33%, BL-V2 +67%; all $p<0.001$) and increased mildly in the CG solely after 3 months (MEDAS: BL-V1 +17%, $p<0.01$). After one year, fecal levels of the anti-carcinogenic ursodeoxycholic acid increased in the IG but not in the CG (IG: +66%, $p<0.05$). The carcinogenic LCFA C16:0 decreased by trend in the IG but not in the CG (IG: BL-V2 -8%, $p=0.063$). Accordingly, the MedD-Scores correlated inversely with C16:0 in the IG: BL: $r=-0.330$, $p=0.027$; V1: $r=-0.303$, $p=0.043$ (MEDAS); V1: $r=-0.332$, $p=0.026$; V2: $r=-0.299$, $p=0.046$ (MedD-Score). Furthermore, the anti-carcinogenic alpha-linolenic acid increased in the IG but not in the CG (IG: BL-V1 +155%, BL-V2 +221%, $p<0.05$).

Conclusion: Adherence to the MedD improved fecal BA and LCFA profiles, which may decrease breast cancer risk [3,4].

References:

[1] Kiechle et al., *Trials*, 2016.

[2] Trichopoulou et al., *N Engl J Med*, 2003.

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[4] Liu & Ma, *Nutrients*, 2014.

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LB-24

VERY LOW-PROTEIN DIET SUPPLEMENTED: CLINICALS AND ECONOMICS BENEFITS IN PATIENTS WITH ADVANCED CHRONIC RENAL FAILURE.

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Rationale: The low-protein diet effectively slows the progression of chronic kidney disease (CKD) and postpones the initiation of dialysis treatment. Our Center adopted a very low-protein diet (0.3 g/kg/day) supplemented with essential aminoacids, without ketoanalogues, in patients with $eGFR < 15$ ml/min(1).

Methods: 110 patients were initiated for nutritional therapy (mean age 75.7+/-13.9, M 60.9%, diabetic 36.4%, heart disease 22.7%, all hypertensive) who were detected at the start of observation, every 3 months and for 24 months, characterizing blood chemistry tests and body composition.

Results: An improvement in azotemia (T0 vs T6; $p<0.001$) and uricemia values was observed; stationarity of $eGFR$, electrolytes, and glycemia; maintenance within the expected values for hemoglobin and albuminemia. The BMI remained on average, always within normal values with an improving trend in the body composition; there was no malnutrition signs. There were 18 deaths (9 patients over 85 years old), 17 entries in DP, 19 in HD, and 3 pre-emptive living transplants. 9 patients had functional recovery ($eGFR > 15$ mL/min). A total of 662 months of dialysis was avoided with an estimated economic saving of approximately € 1.5 million. There is a significant difference between compliant (91%) and non-compliant patients in preserving renal function and delayed entry into dialysis (Log Rank $p<0.02$).

Conclusion: Thanks to high compliance, we obtained a slowdown in the progression of CKD and improved metabolic, electrolyte, and body composition control, allowing patients to delay the start of dialysis. This resulted in an important economic saving estimated at around 21 thousand €/patient (around 2300 €/pt/month).

References:

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LB-25

QUALITY OF LIFE AND HOME PARENTERAL NUTRITION: A SURVEY OF UK HEALTHCARE PROFESSIONALS' KNOWLEDGE, PRACTICE AND OPINIONS

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Rationale: There is increasing interest in the assessment of health-related quality of life (QoL) in the care of patients treated with home parenteral nutrition (HPN). However, it is not known whether healthcare professionals (HCPs) have embedded QoL assessment into routine clinical practice in line with current guidelines¹, and to favour a more holistic approach to HPN care. Without the approach being embedded in practice it will not impact on patients to the degree that it should. The aim of this study was to assess knowledge, current practice and the opinions of healthcare professionals regarding QoL in care of patients on HPN.