

ESPEN 2023 Late Breaking Abstracts

Topic: Micronutrients

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IMPROVED MICRONUTRIENT INTAKE WITH PLANT-BASED ORAL NUTRITIONAL SUPPLEMENTATION IN PATIENTS AT RISK OF DISEASE-RELATED MALNUTRITION

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Rationale: Micronutrient deficiency is a concern for patients at risk of disease-related malnutrition (DRM), particularly for those following a plant-based or vegan diet. In this study, the effect of a plant-based oral nutritional supplement (ONS) on micronutrient intake in patients at risk of DRM was evaluated.

Methods: 23 patients with multiple diagnoses at risk of DRM (age: 60±18yrs; BMI: 19.0±3.4kg/m²) continued their habitual feeding regimen for 1day (baseline), then received dietary advice alongside ≥1bottle/day of a ready-to-drink, plant-based, nutritionally complete ONS (Fortisip PlantBased; 300kcal, 12g protein, 200ml; Nutricia Ltd., UK) for 7 to 28days (intervention). Dietary intake (24h recall), recorded at baseline and end of intervention, was analysed for micronutrient intakes (Nutritics, V5.78) and compared with UK reference intakes and ESPEN guidelines^{1,2}.

Results: Mean total daily micronutrient intake significantly increased with the intervention compared to baseline for potassium, calcium, iron, copper, zinc, selenium, vitamin D, and vitamin C ($p<0.05$). Mean intake for all other micronutrients was either maintained or increased ($p\geq0.06$). At baseline, mean daily intake of 7/20 and 5/19 micronutrients met the UK age- and sex-specific reference nutrient intake (RNI) and ESPEN guideline value, respectively. This significantly increased to 14/20 and 12/19 micronutrients, respectively, with the intervention ($p<0.01$).

Conclusion: In patients at risk of DRM, a ready-to-drink, nutritionally complete, plant-based ONS alongside dietary advice improved micronutrient intake to better meet UK reference intakes and ESPEN guideline values in patients at risk of DRM.

References: 1.Department of Health (1991). Dietary Reference Values for Food Energy and Nutrients for the United Kingdom.

2.Berger et al. (2022). ESPEN micronutrient guideline. Clinical Nutrition.

Disclosure of Interest: C. Griffen Other: Nutricia employee, M. Delsoglio Other: Nutricia employee, R. Syed: None Declared, T. Cookson: None Declared, H. Saliba: None Declared, A. Vowles: None Declared, S. Davies: None Declared, N. Willey: None Declared, J. Thomas: None Declared, N. Millen: None Declared, N. Odeh: None Declared, J. Longstaff: None Declared, N. Hatchett: None Declared, H. Offer: None Declared, C. Howell: None Declared, M. Sanders: None Declared, K. Gaffigan: None Declared, K. Garrett: None Declared, S. Foster: None Declared, A. Salt: None Declared, E.

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