

Evaluation of the effects of a new ready to drink, plant-based oral nutritional supplement (ONS) in adult community patients at risk of disease-related malnutrition (DRM).

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Rationale: The use of oral nutritional supplements (ONS) has been shown to be effective for managing disease-related malnutrition (DRM). The aim of this one-arm multi-centre intervention study was to evaluate the effects of a plant-based ONS in community adult patients at risk of DRM.

Methods: A ready to drink, plant-based, nutritionally complete ONS (300kcal, 12g protein: 1.5kcal/ml, Nutricia Ltd., UK), was prescribed (≥ 1 /day) alongside dietary advice for 28 days, to adult community-based patients with multiple diagnoses at risk of DRM. Body weight, BMI, 'MUST' score¹, dietary intake (24h dietary recall), and appetite (Simplified Nutritional Appetite Questionnaire (SNAQ)²) were assessed at baseline and intervention end. Intention to treat data analysis was performed.

Results: Twenty-four patients (age: 59 ± 18 years; BMI: 18.9 ± 3.3 kg/m²) were included. High risk of malnutrition¹ reduced from 20 to 16 patients ($p=0.046$) with a significant increase in body weight ($+0.6 \pm 1.2$ kg, $p=0.02$) and BMI ($+0.2 \pm 0.5$ kg/m², $p=0.03$) at intervention end. Total energy intake significantly increased (from 1204 ± 575 kcal/day to 1576 ± 404 kcal/day, $+371 \pm 457$ kcal/day, $p=0.001$), as well as protein intake (from 44 ± 21 g/day to 58 ± 17 g/day, $+14 \pm 39$ g/day, $p=0.03$). Appetite (from 11.3 ± 3.0 to 11.9 ± 3.5 , $p=0.13$) and food-only energy intake (from 1078 ± 368 kcal/day to 1208 ± 319 kcal/day, $+130 \pm 325$ kcal/day; $p=0.43$) were maintained throughout the study.

Conclusion: The intervention with a new ready to drink, plant-based ONS alongside dietary advice significantly improved clinical outcomes in community-based patients at risk of DRM. Further investigation is required to ascertain the clinical benefits of using a plant-based supplement in the management of patients with malnutrition.

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2. Wilson MM, et al. Appetite assessment: simple appetite questionnaire predicts weight loss in community-dwelling adults and nursing home residents. American Journal of Clinical Nutrition. 2005;82(5):1074-81.