

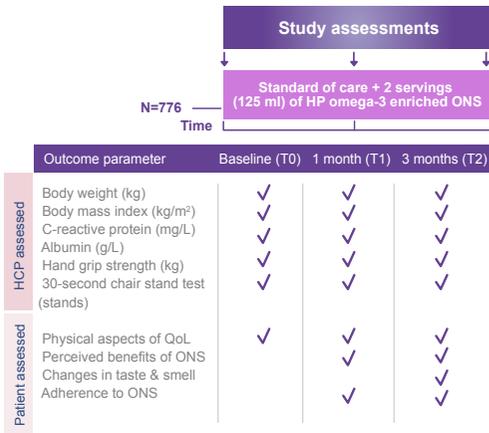
EVALUATION OF A 3-MONTH INTERVENTION WITH LOW VOLUME HIGH PROTEIN OMEGA-3 ENRICHED ORAL NUTRITIONAL SUPPLEMENT ON BODY WEIGHT, INFLAMMATION, MUSCLE STRENGTH AND PATIENT-REPORTED OUTCOMES IN PATIENTS WITH CANCER

INTRODUCTION

Malnutrition in patients with cancer can result from multiple factors, such as decreased food intake and metabolic changes, with inflammation playing a key role. **Omega-3 fatty acids (EPA and DHA), known for their anti-inflammatory properties, are recommended in ESPEN and ESMO guidelines.** These guidelines suggest using omega-3 fatty acids to stabilize or improve appetite, food intake, lean body mass, and body weight in patients with cancer²⁻⁴.

METHODS

In this single-arm, multi-centre study, the impact of a low volume, high protein, omega-3 enriched oral nutritional supplement (ONS: Fortimel® Forticare Sensations (125ml, 18g protein, 306kcal, 11g EPA, 0.7g DHA, 10µg vitamin D)) on body weight, inflammation, muscle strength and patient-reported outcomes in adult patients with cancer receiving anti-cancer treatment was evaluated.



POPULATION

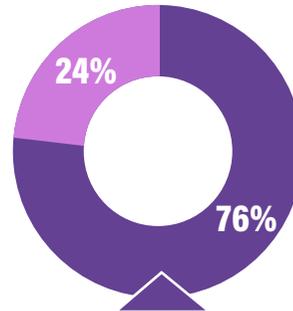
Table 1. Demographic and clinical characteristics of patients at baseline (n=776).

Parameter	Mean (SD)
Age (years) ^a	65 (12)
	n (%)
Sex^b	
Females	404 (52.7)
Males	362 (47.3)
Body mass index (kg/m²)^c	
<18.5	93 (12.3)
18.5-24.9	476 (63.0)
25-30	164 (21.7)
>30	23 (3.0)
Body weight loss in the last six months (kg)^d	
< 5%	174 (22.7)
5-10%	409 (53.3)
>10%	185 (24.0)
C-reactive protein (mg/L)^e	
≤10	280 (35.4)
>10	474 (64.6)
Albumin (g/dL)^f	
<35	425 (56.7)
≥35	324 (43.3)
Treatment intent^g	
Curative	363 (47.8)
Palliative	397 (52.2)
Tumour site^h	
Upper GI	169 (27)
Lower GI	116 (19)
Breast	84 (14)
Lung	62 (10)
Head and neck	61 (10)
Urological	46 (7)
Gynaecological	29 (5)
Non-site specific/unknown	15 (2)
Haematological	13 (2)
Skin	12 (2)
Other	14 (2)

Missing data: ^an=4; ^bn=10; ^cn=20; ^dn=8; ^en=42; ^fn=27; ^gn=16; ^hn=155

RESULTS

76% of patients gained or stabilized body weight over 3 months



Mean gain in body weight was 1 kg (SD 3.4, P<0.0001) over 3 months.

Figure 1: Body weight

■ % of patients that gained or stabilized body weight
■ % of patients that lost body weight



Patients reported improved physical aspects of QoL

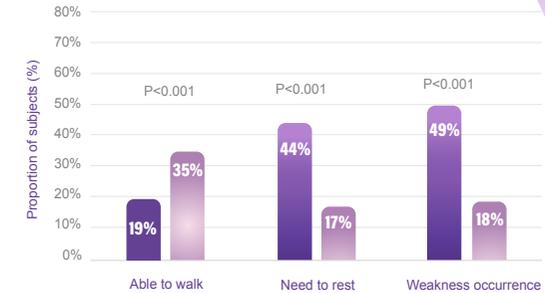
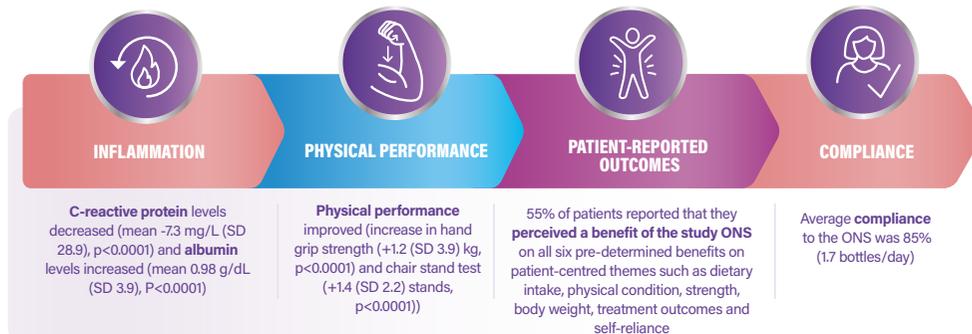


Figure 2: Physical aspects of QoL

Are you able to walk 20 minutes?
Improvement in ability to walk +16%
Did you need to rest during the day?
Decrease in the need to rest -27%
Did you feel weak during the last week?
Decrease in weakness -31%



CONCLUSION

Patient with cancer receiving anti-cancer treatment and consuming a low volume, high protein, omega-3 enriched ONS twice daily for 3 months gained weight, reduced inflammation, and improved physical performance and patient-reported outcomes.

RELEVANCE FOR CLINICAL PRACTICE

Weight and muscle loss can adversely impact clinical and patient-reported outcomes¹. ONS are important for the management of malnutrition in patients with cancer^{1,5}. Tailored nutritional interventions with high protein, omega-3 enriched ONS can be an effective strategy to support nutritional and patient-reported outcomes in patients with cancer.

EPA: eicosapentaenoic acid DHA: docosahexaenoic acid QoL: quality of life ONS: oral nutritional supplement SD: standard deviation

Presented at the 46th ESPEN Congress 2024 in Milan by Holeckova et al.

References: 1. Muscaritoli et al. 2021 Clin Nutr, 40(5):2898-2913. 2. Morland et al. 2016 JNIM, 5:107-116. 3. Mocellin et al. 2013 Lipids, 48(9):879-88. 4. Finocchiaro et al. 2012 B J Nutr, 108(2):327-335. 5. Arends et al. ESMO OPEN 2021, 6(3):100092

Fortimel Forticare is a food for special medical purposes, for the dietary management of patients with or at risk of disease related malnutrition due to cancer, chronic catabolic disease or cachexia. It must be used under medical supervision.

