

IMPROVING REHABILITATION IN SARCOPENIA (IRIS STUDY)

A muscle-targeted nutritional intervention to optimise recovery

'Sarcopenia' is the progressive **loss of muscle mass, strength and physical performance**, and is associated with aging and can be accelerated by disease and/or malnutrition.¹

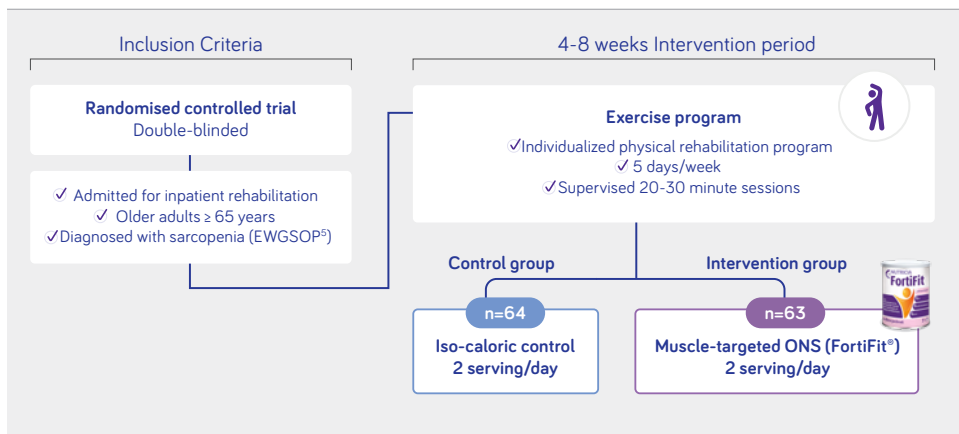
Nutritional interventions to manage sarcopenia are focused on the provision of high-quality proteins, sufficient calories and managing vitamin D deficiency.²

The IRIS study³ was undertaken in older patients with sarcopenia admitted to a rehabilitation facility. This study evaluated the efficacy of a muscle-targeted nutritional intervention combined with an individualized physical rehabilitation program on functional outcomes, independence and length of rehabilitation stay.

Prevalence of **sarcopenia** in older adults up to **76%** in the rehabilitation setting⁴



STUDY METHODOLOGY³



FORTIFIT® as Muscle-Targeted ONS

FortiFit contains ActiSyn, a unique combination of specific nutrients designed to stimulate muscle protein synthesis

100% Whey protein (21g total protein)

A high-quality and "fast" protein: rich in essential amino acids (EAA), with high and rapid bioavailability of EAA^{6,7}

Leucine (3g)

An essential amino acid that is a powerful activator of muscle protein synthesis^{8,9}

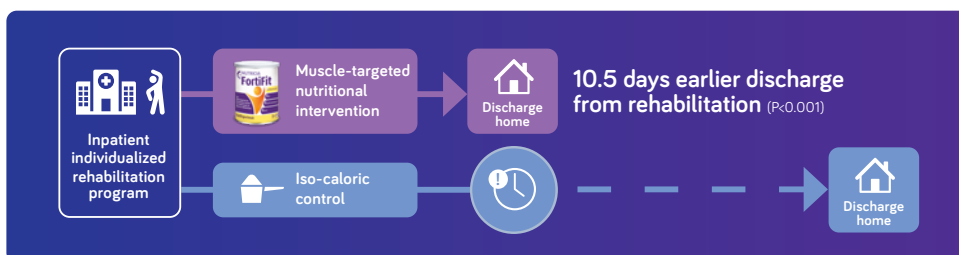
Vitamin D (20µg)

Vitamin D sensitizes the muscle anabolic response to leucine¹⁰

STUDY RESULTS³

SPEEDING UP THE ROAD TO RECOVERY

Statistically significant improvements demonstrated in intervention vs control group



FortiFit is a Food for Special Medical Purposes (FSMP) and must be used under medical supervision

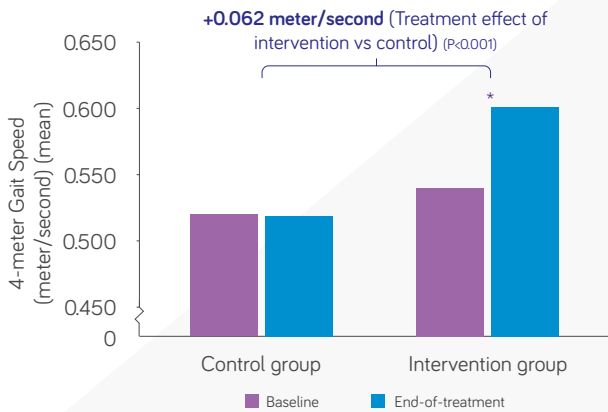
Improvement in key outcomes (changes standardized per month)*:

MUSCLE FUNCTION

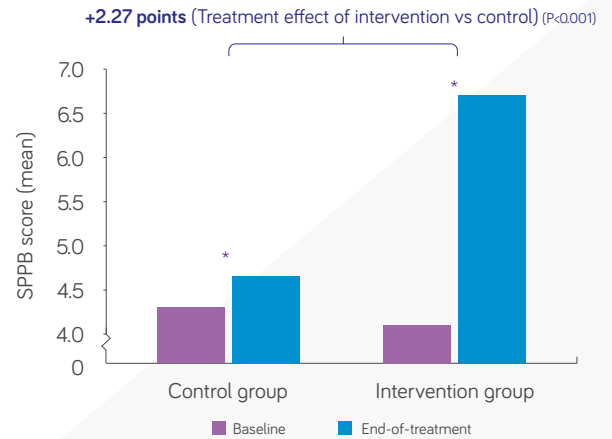


PRIMARY OUTCOME

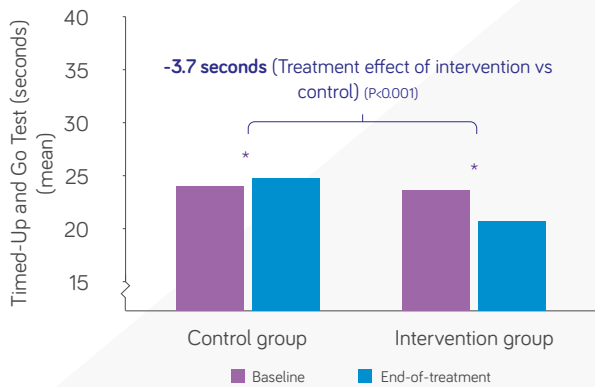
Gait Speed Test



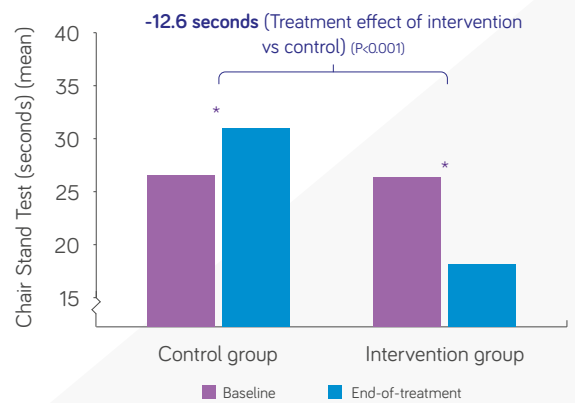
Short Physical Performance Battery (SPPB)



Timed-Up and Go Test (TUG)



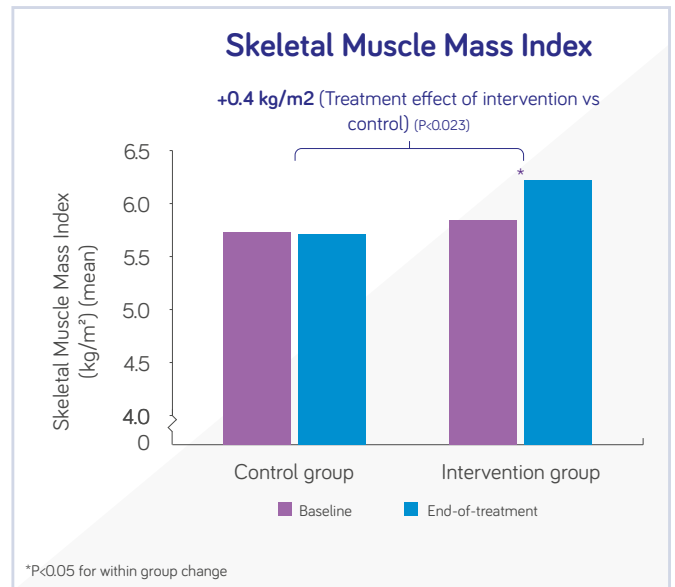
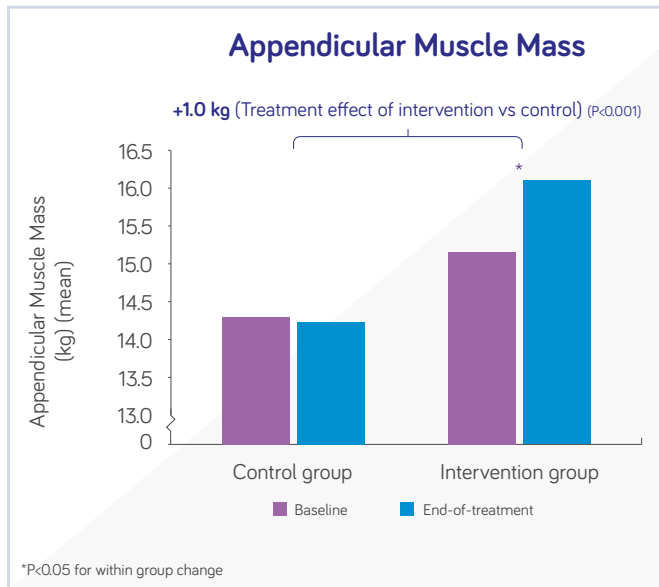
Chair Stand Test



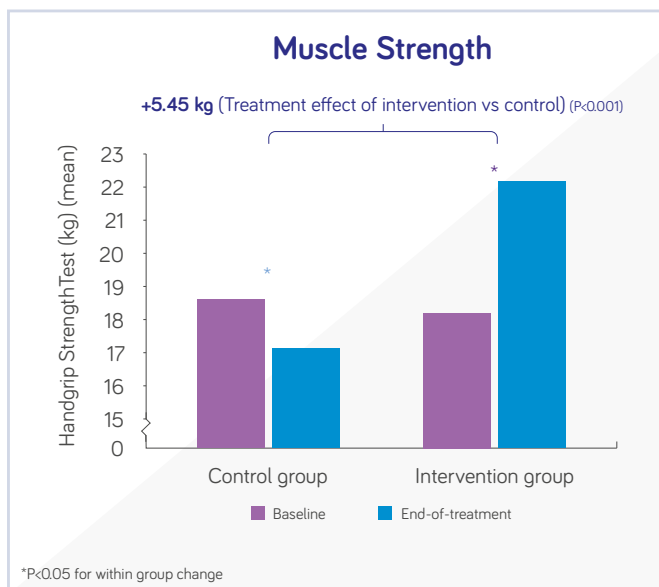
* Values represent between group difference in favor of the intervention group. Please refer to reference for full interpretation of results³

Improvement in key outcomes (changes standardized per month)*:

MUSCLE MASS

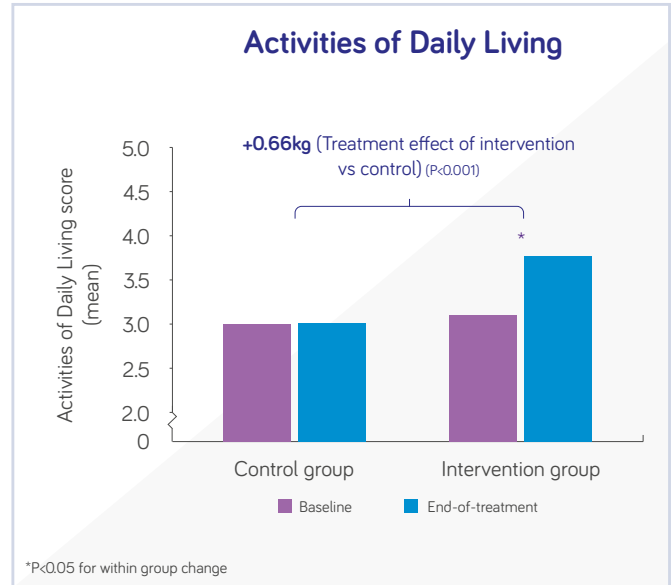
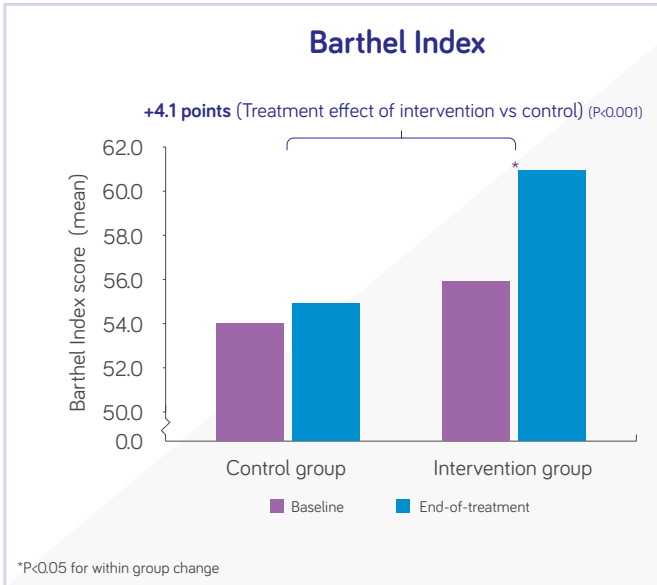


MUSCLE STRENGTH



* Values represent between group difference in favor of the intervention group. Please refer to reference for full interpretation of results³

INDEPENDENCE



* Values represent between group difference in favor of the intervention group. Please refer to reference for full interpretation of results³

CONCLUSIONS

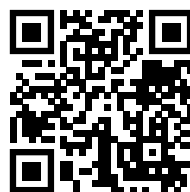
- ✓ This trial demonstrates the efficacy of this multimodal intervention, consisting of muscle-targeted ONS (FortiFit®) and individualized exercise program, on **optimizing recovery in patients with sarcopenia**
- ✓ Incorporating strength and functional outcome measures into routine clinical practice can help to successfully track recovery and **justify the value of muscle-targeted nutritional interventions**

THE CLINICAL VALUE OF MUSCLE-TARGETED ORAL NUTRITIONAL SUPPLEMENTS CONTAINING ACTISYN™



Scan here to learn more on the robust evidence base behind this muscle-targeted nutritional intervention (FortiFit)

NARRATIVE REVIEW DESCRIBING WHY ACTISYN SHOULD BE CONSIDERED FIRST-LINE TREATMENT FOR SARCOPENIA



Scan here to to read publication 'Whey Protein, Leucine-and Vitamin-D-Enriched Oral Nutritional Supplementation for the Treatment of Sarcopenia' by Dr. Emanuele Cereda

References: 1. Cruz-Jentoft, et al. Age Ageing. 2019;48:16-31. 2. Dent, et al. J Nutr Health Aging. 2018;22:1148-61. 3. Rondanelli, et al. J Cachexia Sarcopenia Muscle. 2020. doi: 10.1002/jcsm.12532 4. Wojziszke, et al. Eur Geriatr Med. 2020;11:195-207 5. Cruz-Jentoft, et al. Age Ageing. 2010;39:412-23. 6. Dangin M, Guillet C, Garcia-Rodenas C, et al. The rate of protein digestion affects protein gain differently during aging in humans. J Physiol. 2003;549:635-44. 7. Pennings B, Boirie Y, Senden JM, et al. Whey protein stimulates postprandial muscle protein accretion more effectively than do casein and casein hydrolysate in older men. Am J Clin Nutr. 2011;93:997-1005. 8. Garlick PJ. The role of leucine in the regulation of protein metabolism. J Nutr. 2005;135:1553S-6S. 9. Anthony JC, Yoshizawa F, Anthony TG, et al. Leucine stimulates translation initiation in skeletal muscle of postabsorptive rats via a rapamycin-sensitive pathway. J Nutr. 2000;130:2413-9. 10. Salles J, Chanet A, Giradet C, et al. 1,25(OH)2-vitamin D3 enhances the stimulating effect of leucine and insulin on protein synthesis rate through Akt/PKB and mTOR mediated pathways in murine C2C12 skeletal myotubes. Mol Nutr Food Res. 2013;57:2137-46.