

P16 | Influence of physical exercise and protein supplementation in quality of life (SF36) in seniors living in the community

Loureiro, H.¹; Pocinho, M.²; Faria, A.¹; Lages, M.³; Silva, M.⁴; Martins, R.⁴; Veríssimo, M. T.⁵

¹ Department of Dietetics and Nutrition, Coimbra Health School, Polytechnic Institute of Coimbra

² Department of Complementary Sciences, Coimbra Health School, Polytechnic Institute of Coimbra

³ ciTechCare, Polytechnic Institute of Leiria, Leiria

⁴ Faculty of Sport Sciences and Physical Education, University of Coimbra, Coimbra

⁵ Hospital of University of Coimbra, Coimbra

Ageing is characterized by a gradual loss of functions, being a natural and physiological process and markedly heterogeneous. It is possible to modify the trajectories of functional decline and promote successful ageing; physical exercise and nutrition have shown benefits. The aim of this study was to verify the influence of protein supplementation associated with physical activity in Quality of life (QoL) in Seniors living in the community.

A clinical, prospective, randomized, placebo-controlled study was developed. Sample was probabilistic and randomly assigned. Subjects were distributed through the 4 arms of the study with 19 participants each: 1-physical exercise (strength + resistance)+ protein supplement (20g); 2-physical exercise (strength + resistance) + placebo; 3-protein supplement (20g); 4-control group, without intervention. Each group was assessed at baseline and after 12 weeks. QoL was assessed through SF36 questionnaire, before and after intervention.

The sample consisted of 79 individuals, 55 women and 25 men, with a mean age of 68.54±5.72 years, mean height 1.57±0.09m, mean weight 72.7±14.3 kg, being homogeneous with respect to age, sex and the anthropometric characteristics (BMI, arm and leg circumference). Groups 1 and 2 significantly improved their QoL ($p < 0.05$) during the study. QoL improvement was greater in groups 1 and 3 than 2 and 4 ($p < 0.05$).

Subjects in group 4 worsened their outcomes in all domains of QoL assessed. Protein supplementation revealed a positive influence on QoL, especially when associated with exercise. In fact, seniors who were not supplemented and did not performed a prescribed exercise showed a worsening of their QoL throughout the study.