

Paper Category:	Nutrition
Paper Title: (Arial Font; 14 Pt Size)	Empowering Pre-frail Seniors: Assessing the Effects of a Community Nutrition Education Intervention on Nutritional Intake and Sarcopenia Markers
Abstract Body: (Arial Font; 12Pt Size)	<ul style="list-style-type: none"> • Background • Objectives • Method • Results • Discussions and Conclusions
<p>Sarcopenia is common amongst seniors and can contribute to frailty. Early intervention, such as optimising nutritional intake, can potentially improve sarcopenia markers (muscle mass, strength, performance) and reverse pre-frailty in seniors.</p> <p>This study aimed to investigate the effects of a 4-month nutrition education intervention on nutritional intake and sarcopenia markers in pre-frail community seniors.</p> <p>The nutrition education intervention aimed to facilitate healthy eating habits to prevent frailty progression in pre-frail seniors (≥ 55 years) at senior activity centres. It included didactics teaching, food-based games and grocery trips. Nutritional status (Subjective Global Assessment), dietary intake (3-day diet recall), handgrip strength (HGS), 5-time chair stand test (5STS) and Short Physical Performance Battery (SPPB) score were collected pre-, post- and 6-month post-intervention.</p> <p>Amongst 172 participants (75% female, 83% Chinese, mean age 71), 27.3% were at risk of malnutrition (RM) and 5.8% were malnourished (M). Participants increased daily intake of calorie (pre:1421kcal to post:1560kcal, $p<0.001$), protein (75.1g to 83.3g, $p<0.001$), and protein/kg (1.40g to 1.54g, $p<0.001$). There was no significant difference in HGS, 5STS and SPPB post-intervention.</p> <p>Well-nourished (WN) participants had better sarcopenic markers compared to RM/M participants at baseline – HGS (20.2kg vs 17.2kg, $p=0.005$), 5STS (10.62sec vs 13.18sec, $p=0.026$) and SPPB (10.8 vs 9.9, $p=0.039$). Post-intervention sub-analysis based on AWGS 2019 revealed participants above the 5STS cutoff (<12sec) consumed more protein/day (above:85.3g vs below:77.7g, $p=0.021$) and protein/kg/day (1.56g vs 1.41g, $p=0.044$). Those above SPPB cutoff (>9) also consumed more protein/kg/day (1.55g vs 1.39g, $p=0.040$). All post-intervention significant results were not sustained at 6-month post intervention.</p> <p>A practical community nutrition education intervention was effective in improving nutritional intake of pre-frail seniors. Optimising nutritional status with the focus on improving protein intake can help to prevent sarcopenia and frailty. Future studies should focus on studying factors that drive sustainable improvement in pre-frail community seniors.</p>	

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