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**Publication date**

2018

**Document Version**

Final published version

[Link to publication](#)

**Citation for published version (APA):**

van den Helder, J., van Dronkelaar, C., Tieland, M., & Weijs, P. J. M. (2018). *Digitally supported dietary counseling increases protein intake in community dwelling older adults: preliminary results of the VITAMIN RCT*. Poster session presented at 40th ESPEN congress, Madrid, Spain.

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# DIGITALLY SUPPORTED DIETARY COUNSELING INCREASES PROTEIN INTAKE IN COMMUNITY DWELLING OLDER ADULTS

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## Rationale

In order to prevent sarcopenia in community dwelling older adults a higher daily protein intake is needed. A new e-health strategy for dietary counseling was used with the aim to increase total daily protein intake to optimal levels (minimal 1.2 g/kg/day, optimal 1.5 g/kg/day) through use of regular food products.

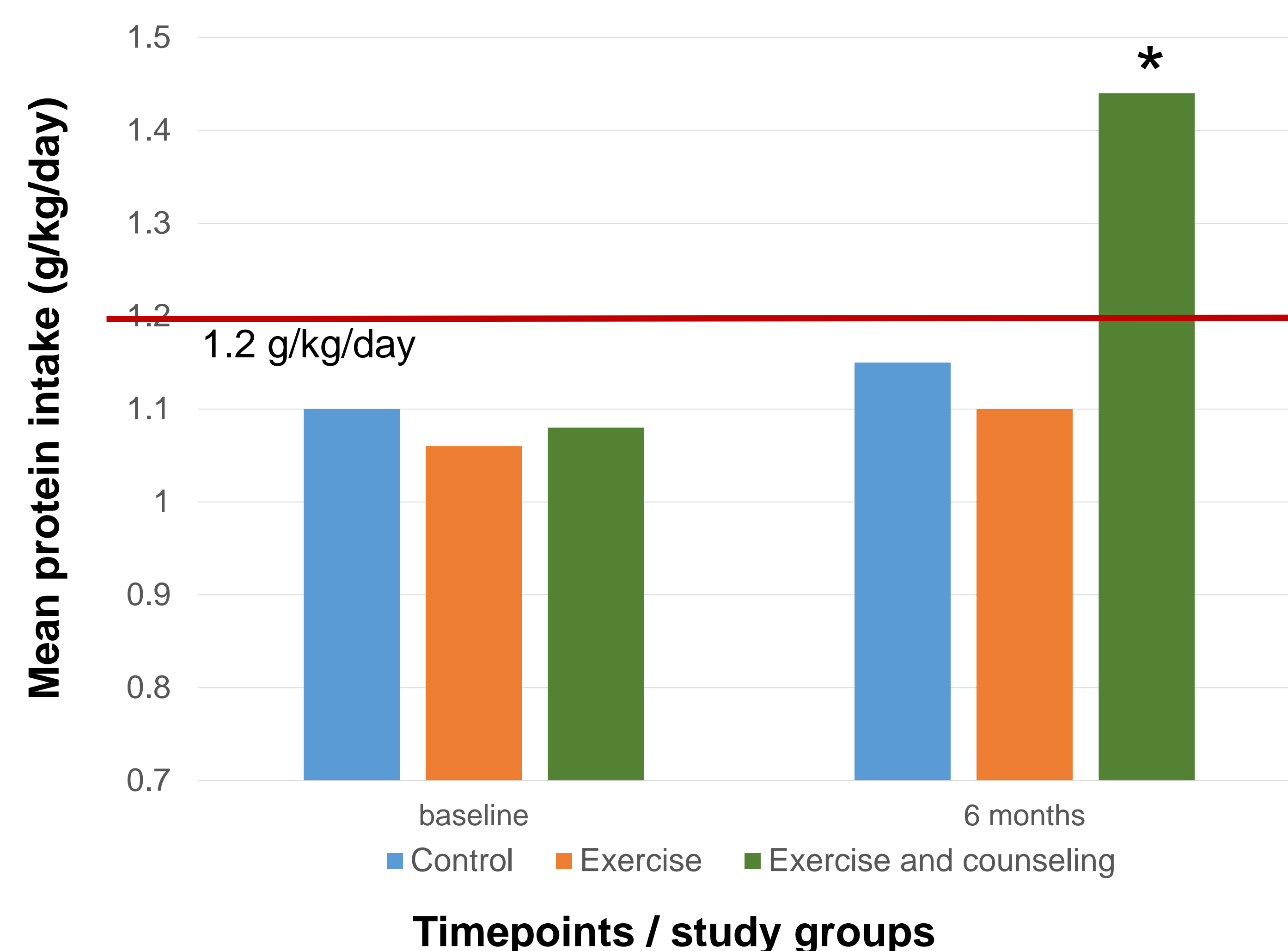
## Methods

The VITAMIN (VITal AMsterdam older adults IN the city) RCT included 245 community dwelling older adults (age ≥ 55y): control, exercise, and exercise plus dietary counseling (protein) group. Dietary intake was measured by a 3-day dietary record at baseline and after 6 months intervention. In total 173 subjects were eligible for analysis. A two-way mixed ANOVA with time, group, and time\*group interaction was performed. Post-hoc Bonferroni was performed with significance level at  $p < 0.05$ .



## Conclusion

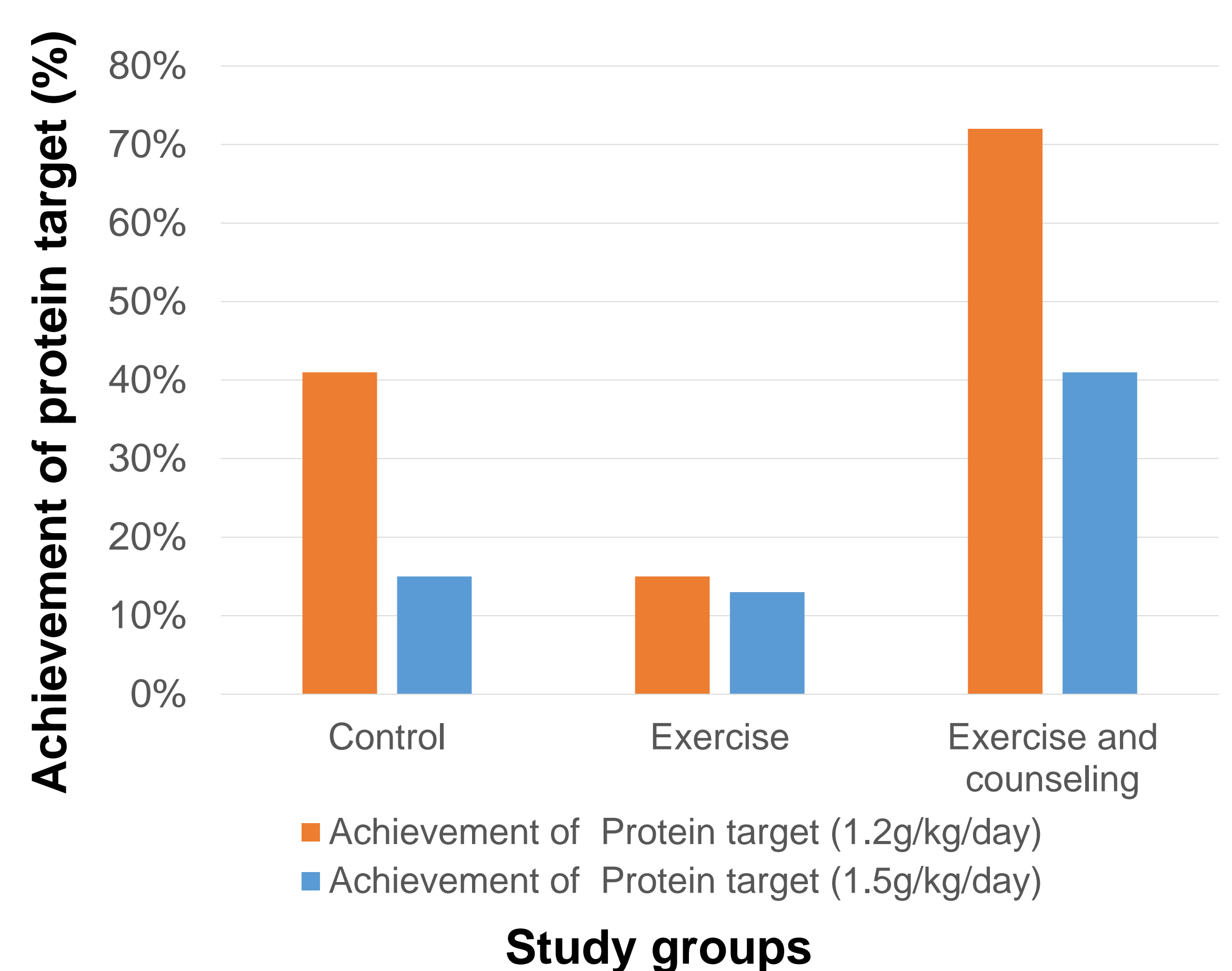
This study shows digitally supported dietary counseling improves protein intake sufficiently in community dwelling older adults. Protein intake increase by counseling with e-health is a promising strategy for dietitians and health care professionals in order to support healthy ageing.



**Figure 1. Mean protein intake of the study groups of community dwelling older adults.**

## Results

Mean age of the subjects was  $72.1 \pm 6.3$ , with a BMI of  $25.7 \pm 4.2$  of which 68% were females. ANOVA revealed significant effect of time, group and time\*group ( $p < 0.001$ ). Figure 1 shows higher protein intake over time in the dietary counseling group than either control ( $p = 0.038$ ) or exercise ( $p = 0.008$ ) group. Additional analyses revealed no change in vegetable protein intake. The higher protein intake was fully accounted for by animal protein intake. In the dietary counseling group 72% of subjects increased protein intake above the minimum intake level and 41% of the subjects above optimal level (see Figure 2).



**Figure 2. Achievement of protein intake recommendations for the study groups of community dwelling older adults.**

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