

Digitally supported dietary counseling increases protein intake in community dwelling older adults: preliminary results of the VITAMIN RCT

Author(s)

van den Helder, J.; van Dronkelaar, C.; Tieland, M.; Weijs, P.J.M.

Publication date

2018

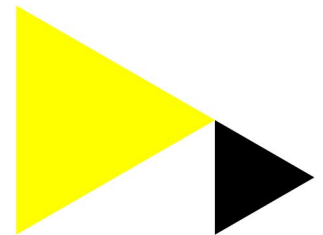
Document Version

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 Science Exchange Day, Amsterdam, Netherlands.

**General rights**

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please contact the library: <https://www.amsterdamuas.com/library/contact>, or send a letter to: University Library (Library of the University of Amsterdam and Amsterdam University of Applied Sciences), Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

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

J. van den Helder^{1,2}, C. van Dronkelaar¹, M. Tieland¹, P.J.M. Weijs^{1,3} and VITAMIN research group^{1,2,3,4}

¹ Faculty of Sports and Nutrition, Amsterdam University of Applied Sciences, Amsterdam, The Netherlands; ² Amsterdam Center for Innovative Health Practice (ACHIEVE), Faculty of Health, Amsterdam University of Applied Sciences, Amsterdam, The Netherlands; ³ Department of Nutrition and Dietetics, Amsterdam University Medical Centers, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands; ⁴ CREATE-IT Applied Research, Faculty of Digital Media and Creative Industries, Amsterdam University of Applied Sciences, Amsterdam, The Netherlands.

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.

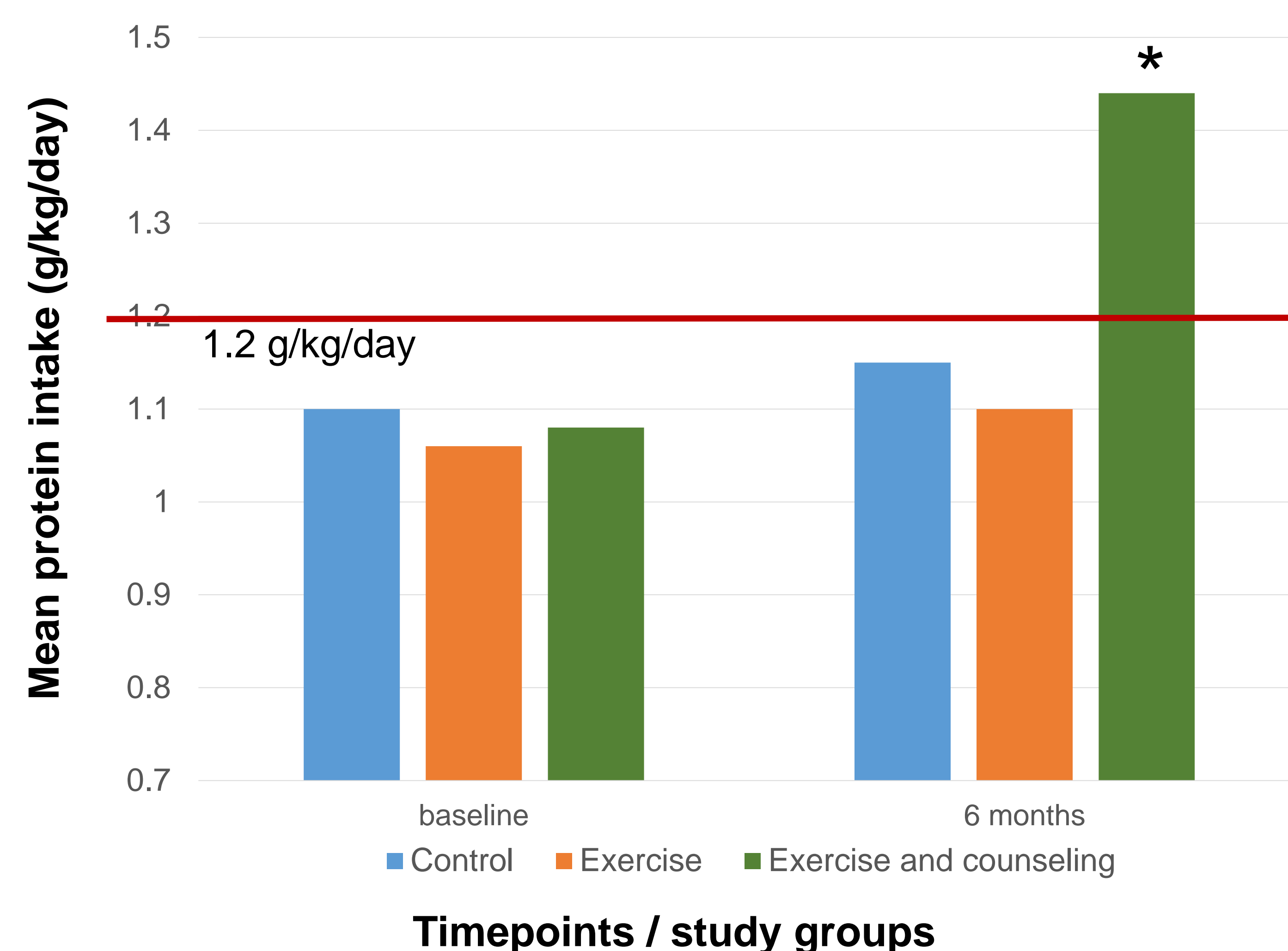


Figure 1. Mean protein intake of the study groups of community dwelling older adults.

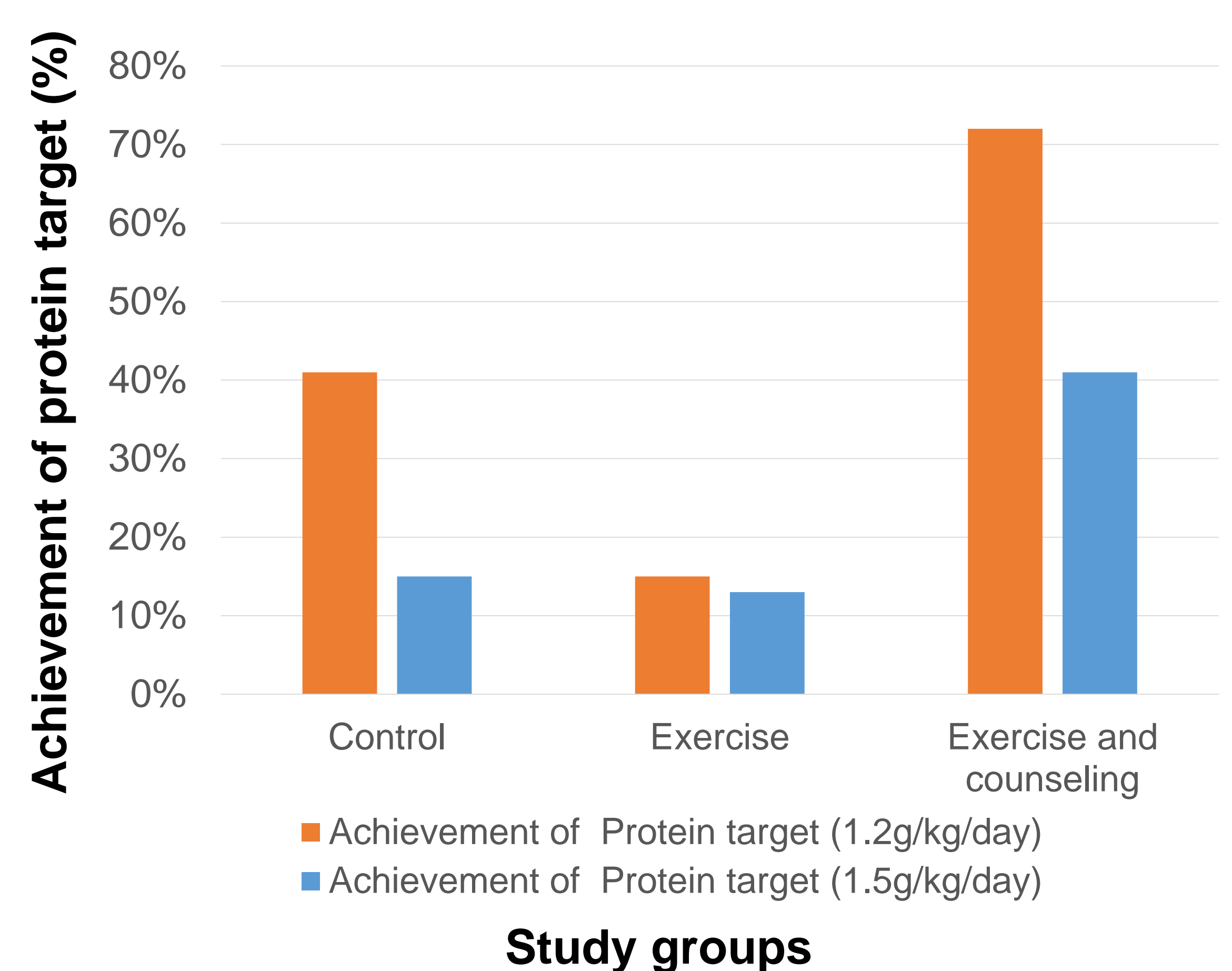


Figure 2. Achievement of protein intake recommendations for the study groups of community dwelling older adults.

Results

Mean age of the subjects was 72.1 ± 6.3 , with a BMI of 25.7 ± 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).

Correspondence

j.e.m.van.den.helder@hva.nl / Jantine van den Helder, Faculty of Sports and Nutrition, Amsterdam University of Applied Sciences, Dokter Meurerlaan 8, 1067 SM Amsterdam, The Netherlands