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

Citation for published version (APA):

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Download date: 30 12 2019
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 (ViTaM 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 dieticians and health care professionals in order to support healthy ageing.

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).

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