

Author(s) & Affiliations

Hanneke Wijnhoven¹, de Vet Riekie², Elstgeest Liset¹, Visser Marjolein^{1,3}

1) Department of Health Sciences, Faculty of Earth and Life Sciences, Vrije Universiteit Amsterdam, Amsterdam Public Health research institute, Amsterdam, the Netherlands; 2) VU University Medical Center, Amsterdam, the Netherlands 3) Department of Internal Medicine, Nutrition and Dietetics, VU University Medical Center, Amsterdam, the Netherlands.

Title of presentation

Development and validation of a short food questionnaire to assess low protein intake in community dwelling older adults

1. Brief description/abstract for the content of the presentation. **150 words maximum**

Introduction / Objectives / Methodology / Results / Conclusion

In old age, sufficient protein intake is important to preserve muscle mass and function. We developed and validated a short food questionnaire (FFQ) to assess low protein intake in community-dwelling older adults. We used data for 1392 older adults (>55 years) of the Longitudinal Aging Study Amsterdam. Protein intake was measured using a 220-item semi-quantitative FFQ. A restricted multivariate prediction model was built to predict protein intake >1.0 g/kg adjusted body weight, including original FFQ questions on frequency and amount of specific foods as independent variables. The final multivariate model included 13 questions (frequency and/or amount) on intake of bread, dairy dessert, milk, eggs, pasta, fish, meat, and cheese. The area-under-the-curve (AUC) was 0.861 (good discriminative ability). The developed short food questionnaire can be used to validly assess low protein intake in community dwelling older adults in the Netherlands. External validation in other countries is needed.

2. Please give two to three key references which can be used to inform future work:

Bauer J, Biolo G, Cederholm T, *et al.* (2013) Evidence-Based Recommendations for Optimal Dietary Protein Intake in Older People: A Position Paper From the PROT-AGE Study Group. *J Amer Med Dir Assoc* 14:542-559.

Rohrman S, Klein G. (2003) Development and validation of a short food list to assess the intake of total fat, saturated, mono-unsaturated, polyunsaturated fatty acids and cholesterol. *Europ J Pub Health* 13:262–268.

3. Please identify up to three specific outcomes that dietitians and participants will take away to inform their future practice.

- A short food questionnaire can be used to assess low protein intake in older adults.