

Bond University
Research Repository



Factors Associated with Suboptimal Meal Intake in Older Adults Residing in Nursing Homes - A Nutritionday study

Van der Meij, Barbara S; Wijnhoven, Hanneke AH; Kruizenga, Hinke M; Jonkers, Cora F; Volkert, Dorothee; Schindler, Karin; Visser, Marjolein

Published in:
Clinical Nutrition

DOI:
[10.1016/S0261-5614\(16\)30474-5](https://doi.org/10.1016/S0261-5614(16)30474-5)

Licence:
CC BY-NC-ND

[Link to output in Bond University research repository.](#)

Recommended citation(APA):
Van der Meij, B. S., Wijnhoven, H. AH., Kruizenga, H. M., Jonkers, C. F., Volkert, D., Schindler, K., & Visser, M. (2016). Factors Associated with Suboptimal Meal Intake in Older Adults Residing in Nursing Homes - A Nutritionday study. *Clinical Nutrition*, 35(Suppl. 1), S92. [SUN-P131]. [https://doi.org/10.1016/S0261-5614\(16\)30474-5](https://doi.org/10.1016/S0261-5614(16)30474-5)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

For more information, or if you believe that this document breaches copyright, please contact the Bond University research repository coordinator.

Factors associated with reduced meal intake in older adults residing in nursing homes – a nutritionDay study

BS van der Meij¹, HAH Wijnhoven², HM Kruizenga^{1,3}, CF Jonkers⁴, D Volkert⁵, K Schindler^{6,7}, M Visser^{1,2} and The NutritionDay Team

¹Nutrition and Dietetics, VU University Medical Center, ²Department of Health Sciences and the EMGO+ Institute, VU University Amsterdam, ³Dutch Malnutrition Steering Group, ⁴Nutrition Support Team, Academic Medical Center Amsterdam, Amsterdam, Netherlands, ⁵Institute for Biomedicine of Aging, Friedrich-Alexander-Universität Erlangen-Nürnberg, Nuremberg, Germany, ⁶Department of Endocrinology and Metabolism, Medical Clinic III, Medical University Vienna, Vienna, Austria

Rationale

Suboptimal food intake is a risk factor of malnutrition in older adults. Malnutrition is associated with complications, prolonged hospital stay and higher health care costs. The aim of this study was to determine meal intake in older adults residing in nursing homes in Europe, and to identify factors associated with a suboptimal meal intake.

Methods

The intake of the main meal of 20,253 older adults (≥ 65 y) in 366 European nursing homes was assessed yearly on one day (nutritionDay) between 2007 and 2012. The association of 32 demographic, disease and nutrition related factors with meal intake ($\leq 50\%$ or $> 50\%$ of the main meal consumed) was examined by multivariate logistic regression (backward stepwise elimination with $P < 0.05$ as final selection criterion).

Results

In total 38.5% of the older adults consumed $\leq 50\%$ of their main meal. Factors independently associated with suboptimal meal intake are displayed in **Table 1**. Factors associated with a lower odds on suboptimal meal intake were: having eaten normal in the past week (OR=0.37), intoxication/injury (OR=0.77), a blenderized diet (OR=0.82) or a normal diet (OR=0.84), subcutaneous nutrition (OR=0.83) or having diabetes (OR=0.73) or diseases of the brain/nerve (OR=0.89) ($P < 0.05$).

Table 1. Factors independently associated with $\leq 50\%$ meal intake

Factor	OR	P
Number of comorbidities	1.08	<0.001
Unable to walk without assistance	1.11	<0.001
Higher age	1.23	<0.001
Swallowing/chewing problems	1.27	0.01
Female	1.31	<0.001
Mentioning "Other reasons for not eating well in the past week"	1.64	<0.001
Nausea	2.13	<0.001
Tooth problems	2.22	<0.001
Loss of appetite	2.46	<0.001
Mentioning "Meals are not adequately prepared for elderly"	3.56	<0.001

Conclusion

More than one-third of older adults in nursing homes consumes half or less than half of their main meal, which could predispose them to malnutrition. Identifying the factors associated with reduced meal intake provides valuable information for preventive interventions.