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

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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 (<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 ≤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).

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.