

## The determinants of malnutrition in the Irish elderly population: preliminary results from The Irish Longitudinal Study on Ageing (TILDA)

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In Ireland, the proportion of the population aged 65 years or more is expected to rise from 11 % in 2006 to 29 % by 2041<sup>(1)</sup>. It is important that older people remain healthy, functional and independent for as long as possible<sup>(2)</sup>. Malnutrition has a detrimental effect on health, wellbeing, quality of life, disease outcome and dependency<sup>(3,4)</sup>. Determinants of malnutrition need to be identified to inform public health policy on its prevention and management. The Malnutrition in the Elderly (MaNuEL) project is conducting comparable analysis of longitudinal European datasets of older people to determine the predictors of nutritional risk. The aim of the current research was to assess the factors associated with developing malnutrition from baseline to 2-year follow-up using data from TILDA.

Data from the publicly accessible wave 1 and wave 2 TILDA datasets were used to conduct univariate regression analysis of a sub-cohort of participants (n = 1,841), using SPSS version 20.0 (IBM Corporation) to determine factors associated with malnutrition at 2-year follow-up. Malnutrition was defined as a BMI <20 kg/m<sup>2</sup> and/or weight loss ≥10 % at follow up. Exclusion criteria included being under 65 years of age, BMI or weight loss data unavailable at baseline and/or follow-up, and having malnutrition at baseline (BMI <20 kg/m<sup>2</sup> or weight loss ≥10 % over 2 years).

Approximately half the cohort was female (50.2 %) with a mean age of 72 years. Determinants associated (p < 0.05) with malnutrition are displayed in the Table.

	OR (95 % CI)		OR (95 % CI)
Older age	1.04 (1.01–1.07)	Polypharmacy (≥5 medications)	1.80 (1.33–2.42)
Unmarried/divorced	1.64 (1.09–2.47)	Hospitalisation during 2 year follow up period	1.63 (1.17–2.27)
Requiring social support	2.50 (1.47–4.28)	Poor self-rated health	2.56 (1.43–4.59)
Low physical activity*	1.54 (1.07–2.22)	Cognitive impairment	1.78 (1.03–3.08)
Difficulty walking	2.41 (1.56–3.72)	Depressive symptoms	1.65 (1.01–2.71)
Difficulty climbing stairs	1.99 (1.49–2.66)		

\*Low physical activity determined using the International Physical Activity Questionnaire.

Risk of malnutrition in TILDA is influenced by determinants from demographic, social, lifestyle, disease-related, physical functioning and psychological domains. In this analysis, gender, appetite, education, living situation, alcohol consumption, smoking, number of chronic diseases, pain, falls and handgrip strength were not associated with malnutrition. Future work will include multivariate regression analysis to establish the strongest independent determinants of malnutrition among the older Irish population.

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