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Nutrition risk factors as predictors of hospitalisations and mortality among Māori and non-Māori community-living octogenarians

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Abstract

Aim: The aim was to examine the consequences of high nutrition risk (hospital admissions and mortality at 24-months) using the Seniors in the Community: Risk Evaluation for Eating and Nutrition, Version II (SCREEN II) nutrition risk domain scores among the participants of the Life and Living in Advanced Age Cohort Study New Zealand.

Methods: Demographic, lifestyles, and health data from 421 Māori (177 males, age: 82-90) and 516 non-Māori (237 males, age: 84-86) was examined at baseline. The Senior's in the Community: Risk Evaluation for Eating and Nutrition (SCREEN II) tool was used to examine three key domains of nutrition risk (1: "weight change"; 2: "dietary intake"; 3: "factors affecting intake"). Multiple regression analyses examined the relationship between SCREEN II domain scores and all-cause hospitalisations and all-cause mortality.

Results: Half of the participants were at high nutrition risk (Māori 49.4%; non-Māori 38.3%), with a higher prevalence among women (Māori 54.2%; non-Māori 48.6%). For Māori, the SCREEN II "dietary intake" domain score was negatively associated with mortality [OR (95%CI) 0.74 (0.71-0.98), $p=0.034$], once adjusted for age, gender, socioeconomic deprivation, education level, previous hospital admission, comorbidities, and activities of daily living. There was trend toward a negative association for all-cause hospitalisations ($p=0.150$). There was no significant relationship between SCREEN II domain scores and hospital admissions or mortality for non-Māori.

Conclusions: For older Māori at high nutrition risk, dietary intake is the strongest nutrition risk predictor of all-cause mortality and may predict risk of hospitalisation. Strategies to ensure dietary adequacy and consumption of a variety of foods may assist to improve health outcomes.

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Glossary of Māori Terms

Māori name	Translation
hapū	sub-tribe
iwi	tribe
kai	food
kuia	older women
kaumātua	older men
te Tangata Whenua	The indigenous people of New Zealand.
whakapapa	genealogical ties
whānau	family, usually inclusive of extended family

List of Abbreviations

Abbreviation	Definition
ADLs	Activities of daily living
BMI	Body mass index
DALYs	Disability Adjusted Life Years
GDS-15	Geriatric depression scale, 15 item index
LiLACS NZ	Life and Living in Advanced Age: a cohort study in New Zealand
NEADL	Nottingham Extended Activities of Daily Living
SCREEN II	Seniors in the Community: Risk Evaluation for Eating and Nutrition version II
2008/09 NZANS	2008/09 New Zealand Adult Nutrition Survey

