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**Prevalence of nutrition risk and associated  
social risk factors in community living older  
adults in the New Zealand Health, Work  
and Retirement Study**

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requirements for the degree of

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## Abstract

**Background:** The New Zealand population is ageing as a result of declining mortality and birth rates. In order for older adults to remain in optimal health, good nutrition is vital. Previous research indicates approximately 50% of New Zealand's community living older adult population are at some degree of nutrition risk. Understanding nutrition risk prevalence and factors associated with increased nutrition risk is vital to reduce healthcare spending. This study aims to determine nutrition risk prevalence and associated health and social risk factors amongst community-living older adults across New Zealand.

**Methods:** A total of 3050 community-living older adults were invited to respond to the 2014 Health, Work and Retirement (HWR) postal survey. This included a nutrition risk assessment using the Seniors in the Community: Risk Evaluation for Eating and Nutrition, abbreviated version (SCREENII-AB) as well as demographic, social and health characteristic measures. Social provisions were determined with the 24-item Social Provisions Scale, and Social and Emotional loneliness were assessed with the 6-item De Jong Gierveld Loneliness Scale. Alcohol intake was determined by using the Alcohol Use Disorders Identification Test (AUDIT-C), and living standards assessed with the Economic Living Standards Index Short Form (ELSI-SF). **Overall,** 136 participants did not complete one or more of the SCREENII-AB items, reducing the sample size to 2914.

**Results:** Of the 2914 participants, 37.2% were found to be at nutrition risk. Half (51.2%) of Māori participants were at nutritional risk compared to a 32.7% of non-Māori. Independent risk factors for Māori were being un-partnered (OR 1.87) and rating general health as fair (OR 4.83). Independent risk factors for non-Māori were being un-partnered (OR 1.94), rating general health as good, fair or poor (OR 2.03, 3.18, 4.39), life satisfaction (OR 0.40), as well as increased total health conditions counts (OR 1.11), and emotional loneliness (OR 1.35).

**Conclusions:** These findings suggest that social eating is required to reduce nutrition risk amongst older adults. Those who are un-partnered may benefit from public health intervention promoting social eating. As Māori had a higher prevalence of

nutrition risk than non-Māori, culturally appropriate strategies are needed to encourage healthy eating practices.

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## Abbreviations

<b>Abbreviation</b>	<b>Definition</b>
AUDIT	Alcohol Use Disorders Identification Test
AUDIT-C	Alcohol Use Disorders Identification Test (Short Form)
AMDR	Average Macronutrient Distribution Range
ANSI	Australian Nutrition Screening Initiative
BMI	Body Mass Index
BMR	Basal Metabolic Rate
DALY	Daily Adjusted Life Year
ELSI-SF	Economic Living Standard Index Short Form
LiLACS NZ	Life and Living in Advanced Age: a Cohort Study in New Zealand
HWR	Health, Work and Retirement
NZ	New Zealand
NZANS	New Zealand Adult Nutrition Survey
MNA-SF	Mini Nutritional Assessment Short Form
MUST	Malnutrition Universal Screening Tool
MPR	Multiple Pass Recall
NSI	Nutrition Screening Initiative
OR	Odds Ratio
SCREENI	Seniors in the Community; Risk Evaluation for Eating and Nutrition, version I
SCREENII	Seniors in the Community; Risk Evaluation for Eating and Nutrition, version II
SCREENII-AB	Seniors in the Community; Risk Evaluation for Eating and Nutrition, version II, Abbreviated Version
SNAQ	Simplified Nutritional Assessment Questionnaire
WHO	World Health Organization