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# Evaluation of nutrition risk in older independent living adults within the Waitemata and North Shore community

A thesis presented in partial fulfilment of the requirements for the degree of

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Emily Margaret Fraser
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# Abstract

*Background:* Research on the prevalence of nutrition risk in community living adults in New Zealand is limited. With the rise in the proportion of older adults in New Zealand, the assessment of nutrition status of older adults will help to determine those at nutrition risk

*Aim:* The aim of this study was to determine the prevalence of nutrition risk amongst independent living older adults residing in the Waitemata district health board (DHB) region of New Zealand. The objectives of this study were to determine nutrition risk using the Mini Nutritional Assessment – Short Form (MNA-SF) Tool and to identify any demographic, social or health factors associated with nutrition risk among older community living adults.

*Methods:* A cross-sectional study of 57 older adults was undertaken. Nutrition risk was assessed using a validated questionnaire, the MNA-SF. Dysphagia risk was determined using the Eating Assessment Tool (EAT-10) and cognitive function was assessed using the Montreal Cognitive Assessment (MoCA). Information on demographic and social information, health status and use of support services was also collected in one-off interviews.

*Results:* Ninety three percent (n=53) of participants had normal nutrition status (MNA-SF score ≥12). Seven percent of participants (n=4) were found to be at-risk of malnutrition (MNA-SF score ≤11; out of maximum score 14). The majority of participants with normal nutrition status were New Zealand European (58%), living with others (77%), were married (60%), were taking less than five medications (74%), had lower numbers of co-morbidities (70%) and were dentate (42%). Compared to those who were at risk, all participants were women (n=4), three were Maori and Pacific ethnicity, three took ≥5 medications and three required support services or daily help. No participants were found to be at-risk of dysphagia in the study.

*Conclusion:* This study found a low prevalence of nutrition risk in a sample of healthy community-dwelling older adults. Our results contribute to the body of evidence that nutrition screening is important to identify those at nutrition risk. Early identification of nutrition risk can help to prevent nutritional problems in older adults and to help adults to remain active and healthy within the community.

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# Abbreviations

| | |
|---|---|
| AD | Alzheimer disease |
| ADL | Activity of daily living |
| BMI | Body mass index |
| CC | Calf Circumference |
| COPD | Chronic obstructive pulmonary disorder |
| CVD | Cardiovascular disease |
| DHB | District health board |
| EAT-10 | Eating Assessment Tool |
| GP | General Practitioner |
| HDEC | Health and Disability Ethics Committees |
| HEI | Healthy Eating Index |
| IHD | Ischemic heart disease |
| LiLACS | Life and Living in Advanced Age study |
| MCI | Mild cognitive impairment |
| MDADI | M.D. Anderson Dysphagia Inventory |
| MMSE | Mini-Mental State Examination |
| MNA | Mini Nutritional Assessment |
| MNA-SF | Mini Nutritional Assessment-Short form |
| MoCA | Montreal Cognitive Assessment |
| MOW | Meals on wheels |
| NHI | National Health Index |
| PHO | Primary Health Organisation |
| SCREEN ll | Seniors in the Community: Risk Evaluation for Eating and Nutrition, version ll |
| WHO | World Health Organisation |