

Nutrition and Healthy Ageing Trajectories in Retirement Living (NutriHAT-RL) in the Australian Capital Territory: Study Protocol







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INTRODUCTION

There are a growing number of people aged over 55 years living in retirement communities in Australia. These communities typically consist of independent living accommodation, services and communal facilities which cater to older people and the desire to maintain independence (1.2).

Retirement village environments are designed to provide communal facilities to promote healthy living in older age. While there is a growing recognition of the contribution of social and community participation on overall health (3), there is a paucity of longitudinal data on its relationship with nutrition in older people living in retirement villages.

AIMS

The aim of the Nutrition and Healthy Ageing Trajectories in Retirement Living (NutriHAT-RL) study is to investigate nutrition and lifestyle-based behaviours that contribute to healthy ageing and the maintenance of social and physical functioning among older people living in retirement village communities.

The study is divided into three phases:

Phase 1: Cross-sectional report

- Analysis of dietary intake and nutrition behaviour
- Prevalence of chronic conditions, mental health and physical function, and their association with dietary intake and nutrition behaviour
- Relationships between nutrition and social capital, including a qualitative component

Phase 2 & 3: Two- & four-year longitudinal study

 Follow-up analysis of dietary intake and nutrition behaviour, and health and wellbeing over time

STUDY DESIGN & METHODS

Study Flow

March 2021-2023:

Recruit people from 32 Retirement Villages in the ACT & Southern NSW regions of Australia



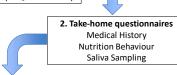
March 2025-2027: Four year follow-up

Inclusion Criteria

- Aged 55 years and over
- · Living in a Retirement Village
 - One person per household
 - Montreal Cognitive Assessment (MoCA)
 - · Score: 26-30 eligible
 - · Score: 12-25 requires a study partner
 - Score: 0-11 ineligible

Data Collection Procedure

1. Face-to-face interview
Informed Consent
Cognitive Screening
Dietary Intake (FFQ, Bitter Taste)



3. Face-to-face clinic Anthropometry/Physical Function Mental Health Social Capital

4. Participant Feedback
Nutrition Snapshot
Anthropometry
Physical Function

Outcome Measures

Dietary Intake & Nutrition Behaviour

Comprehensive validated Food Frequency Questionnaire (FFQ)
Emotional Appetite Questionnaire (EMAQ)
Intuitive Eating Scale-2 (IES-2)
Malnutrition Universal Screening Tool (MUST)
Bitter Taste Endophenotype

Cognition & Mental Health

Montreal Cognitive Assessment (MoCA)
Quality of Life (EQ-5d-5L)
Patient Health Questionnaires-9 (PHQ-9)
Generalised Anxiety Disorder 7-item (GAD-7)
De Jong Gierveld Loneliness Scale

Social Capital

Social Capital Assessment Tool (A-SCAT)
Occupational Roles (Satisfaction with Daily Occupations)
Lubben Social Network Scale (LSNS)
Technology Adherence

Physical Health

International Physical Activity Questionnaire (IPAQ)
Anthropometry (Height, Weight, Circumferences, etc)
Sarcopenia (SARC-F)
Sedentary Blood Pressure (SBP/DBP)
Physical Outcome Measures:

- Hand Grip Strength
- Lower Limb Strength (Chair Stands)
- Upper Limb Strength (Arm Curl)
- Aerobic Fitness Screen (2 minute step test)

Falls Risk Assessment Screen

Fatigue, Resistance, Ambulation, Illnesses, & Loss of Weight (FRAIL)

Medical

Medical History (including Smoking Questionnaire)
Alcohol Use Disorders Identification Test (AUDIT-C)
Pittsburgh Sleep Quality Index (PSQI)
Medication Adherence Rating Scale (MARS)
Saliva (C-Reactive Protein & Telomere Length)
Recent Pathology Laboratory Results

CONCLUSION

The NutriHAT-RL study will be the first Australian longitudinal study with a focus on nutrition and healthy ageing in people living in retirement communities. Findings from this study will contribute to understanding of nutrition and healthy ageing in this growing population and will inform policy and practice related to nutrition and ageing in place.

Ethics: Ethics approval has been obtained through the University of Canberra Human Ethics Research Committee (UCHREC-2306). To reduce a risk of COVID-19 transmissions, a risk mitigation plan has been developed.

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- 1. Property Council of Australia. *National overview of the retirement village sector.* Australia: 2014.
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- 3. Papageorgiou N, et al. Occupational Therapy and Occupational Participation in Community Dwelling Older Adults: A Review of the Evidence. Phys Occup Ther Geriatr. 2016;34(1):21-42.

PROJECT WEBSITE

www.nutrihatrl.org

RESEARCH TEAM

