

Preventing malnutrition in residents of aged care facilities

Nutrient intakes of residents of Australian aged care facilities are suboptimal and do not meet the Australian recommended nutrient requirements. Malnutrition is a significant contributor to morbidity and mortality. Residents are at risk of losing muscle mass and function and may suffer from compromised immune response.

Aged care residents:

88% have at least one indicator of malnutrition [3]

60-72% consume insufficient energy [2]

26-30% consume insufficient protein [2,4]

Receive **half** the recommended intake of calcium [4]

Older persons are particularly vulnerable to malnutrition. The Dietitians Association of Australia reports that between 40 and 70 percent of residents in aged care facilities (RACF) are malnourished.

Malnutrition, particularly that including insufficient energy and protein intake, is associated with increased mortality and morbidity, including increased infections [1], falls, apathy and a loss of mobility, quality of life and independence [2].

This project will investigate the effect of two additional serves of dairy food to increase energy, calcium and protein intake on aged care residents, and measure



the impact this has on simple physical functioning, acceptability of food and quality of life (QoL). We will also conduct a cost-effectiveness analysis to determine the associated changes in health and QoL.

Our feasibility work confirms that this approach can significantly improve nutrient intake. This study

will confirm whether it can also decrease 'sick days', improve activities of daily functioning and quality of life and lessen the financial burden on the aged care system by delaying more intensive care for these residents.



Research Leader and Partners

Professor Kerrie Sanders leads the Economics of Health and Ageing and Nutrition research streams. Her clinical research interests include musculoskeletal medicine, nutrition and health economics. Professor Sanders has led large NHMRC-funded epidemiological,

randomised clinical trial and burden of illness projects which have led to national and international position papers on osteoporosis and vitamin D as well as Australian Government reports on musculoskeletal disease. The project team includes expertise in nutrition, geriatrics,

musculoskeletal science, sarcopenia, exercise physiology and health economics. Project partners include Austin Health, the Australian Institute for Musculoskeletal Science (AIMSS), Monash University, the University of Melbourne and Western Health.

1. Ritz, B.W. and E.M. Gardner, J Nutr, 2006. 136(5): p. 1141-4.; 2. Grieger, J.A. and C.A. Nowson, Eur J Clin Nutr, 2007. 61(5): p. 655-63.; 3. Woods, J.L., et al., J Nutr Health Aging, 2009. 13(8): p. 693-8.; 4. Iuliano, S., et al., J Nutr Health Aging, 2013. 17(6): p. 503-8.



Institute for Health & Ageing



Preventing malnutrition in residents of aged care facilities

Investigators: Professor Kerrie Sanders, Dr Sandra Iuliano-Burns (Austin Health), Professor Gustavo Duque (Western Health, University of Melbourne, AIMSS), Dr David Scott (Monash)

Project staff: Dr Karen Lim

Partners: The University of Melbourne, Austin Health, Western Health, AIMSS, Monash University