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Investigation of protein intakes of Māori in advanced age

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Abstract

Aim: Current knowledge of protein intakes of Māori in advanced age is extremely limited.

Methods: Dietary intakes of 216 Māori men and women aged 80-90 years were assessed using two 24 hour multiple pass recall dietary recalls. Energy, protein and nutrient intakes were analysed using FOODfiles 2010. Animal vs. plant protein intake, protein intake distribution and protein intake from Kai Māori and contemporary Māori foods protein intakes were examined.

Results: Protein intake and percentage of energy as protein consumed met the nutrient reference values for both genders. The intake of animal protein (men = 52.7g, women = 36.6g) was higher than for plant protein (men = 19.8g, women = 18.5g), and the animal: plant ratios for men and women were 2.63 and 1.94, respectively ($p=0.009$). Poultry, fish and seafood were the highest contributors of protein intake and percentage energy of protein in men and women. Protein intake at breakfast (men = 11.7g, women = 9.7g) and lunch (men = 16.8g, women = 14.8g) were inadequate (<30g protein per meal) and similar between the genders ($p>0.05$). Men consumed a larger median amount of protein at dinner than women (34.4g versus 23.3g, $p<0.001$). For men and women respectively there was a low contribution of protein from Kai Māori (median 1.31g and 1.08g) and contemporary Māori foods (median 3.28g and 2.65).

Conclusion: Advanced age Māori met the total and percentage of energy protein requirements but protein distribution was inadequate in light of recent evidence. They had a higher intake of animal compared to plant protein foods. Traditional Māori foods contributed only a small proportion of protein to the diets of these advanced age Māori.

Key words: protein intake, Māori, nutrition, animal protein, plant protein, protein distribution, traditional food, kai, advanced age, older adults

Table of Contents

Acknowledgements	i
Abstract	ii
Table of contents	v
List of tables and appendices	vii
Abbreviations	viii
1.0 Introduction	1
2.0 Literature review	5
2.1 Older Māori in New Zealand	5
2.1.1 Implications of the ageing population in New Zealand	6
2.1.2 Health of older Māori	7
2.1.2a The Māori perspective of health	7
2.1.2b Te taha tinana – chronic disease in Māori	7
2.1.2c Te taha tinana – functional health of Māori	8
2.1.2d Self-perceived health of Māori	9
2.1.2e Te taha hinengaro – mental health status of Māori	10
2.1.3 Health disparity in Māori	10
2.2 Nutritional health of older Māori	11
2.2.1 Energy intakes	11
2.2.2 Protein	12
2.2.2a Protein requirements	12
2.2.2b Protein intake in older Māori	14
2.2.2c Macronutrient distribution of protein	14
2.2.2d Protein percentage of energy intake	15
2.2.3 Protein sources	15
2.2.4 Food security	16
2.3 Dietary protein needs	17
2.3.1 Dietary protein and muscle mass, strength and function	17
2.3.2 Animal versus plant protein	20
2.3.3 Protein intake distribution	22
2.4 Traditional Māori foods	24
2.4.1 Pre-colonial Māori food	24
2.4.2 Māori food beliefs	25
2.4.3 Modern consumption of traditional Māori food	26
2.4.4 Traditional Māori food preparation methods	27
3.0 Methods	29
3.1 Aims and objectives	29

3.1.1 Aim	29
3.1.2 Objectives	29
3.2 Study design: Life and Living in Advanced Age: A Cohort Study in New Zealand – Te Puāwaitanga o Nga Tapuwae Kia Ora Tonu	30
3.3 Study design: cross-sectional study	30
3.4 Recruitment of participants	30
3.5 Measures	31
3.5.1 Demographics	31
3.5.2 Health	32
3.5.3 Cultural practices	32
3.5.4 Nutritional assessment	32
3.5.4a Data collection protocol	32
3.5.4b 24 hour multiple pass recall	32
3.5.4c Quantification of food intake	33
3.5.4d Data entry	34
3.6 Data processing	34
3.6.1 Animal and plant protein foods	34
3.6.2 Protein food groups	34
3.6.3 Distribution of protein intake	35
3.6.4 Assessment of traditional Māori food intake	35
3.6.4a Kai Māori	36
3.6.4b Contemporary traditional Māori kai	37
3.7 Statistical analyses	38
4.0 Results	39
4.1 Demographics	39
4.2 Cultural practices	41
4.3 Summary of dietary intakes (24 hour multiple pass recall)	43
4.4 Animal and plant protein intake	46
4.4.1 Animal food groups	47
4.4.2 Plant food groups	49
4.5 Spread of protein intake	50
4.6 Kai Māori and contemporary traditional Māori food	53
4.6.1 Kai Māori	53
4.6.2 Contemporary traditional Māori food	54
5.0 Discussion	55
6.0 Conclusion	61
References	62
Appendices	71

List of Tables

Table 2-1. Australia and New Zealand protein requirements in older adults_____	13
Table 3-1. Kai Māori food list_____	37
Table 3-2. Examples of foods included in the Contemporary Māori Food list_____	38
Table 4-1. Age and health characteristics of the participants_____	39
Table 4-2. Socio-demographic characteristics of the participants_____	40
Table 4-3. Hapū and iwi identification and importance by the participants_____	41
Table 4-4. Socialising with other Māori_____	42
Table 4-5. Te Reo Māori and tikanga Māori characteristics of the participants____	43
Table 4-6. Macronutrient intake and distributions by the participants_____	44
Table 4-7. Vitamin intake of the participants_____	45
Table 4-8. Mineral and omega-3 fatty acid intake of the participants_____	46
Table 4-9. Animal and plant energy, protein and percent contribution to energy from protein intakes of the participants_____	47
Table 4-10. Total protein, and protein percentage of energy from animal food groups_____	48
Table 4-11. Total plant protein, and plant protein percentage of energy in the participants_____	50
Table 4-12. Spread of protein intake throughout the day_____	52
Table 4-13. Energy, protein, and protein percent of total energy from Kai Māori_	53
Table 4-14. Protein intake and protein percent of total energy from contemporary Māori foods_____	54

Appendices

Appendix 1: Participant information sheet_____	71
Appendix 2: Participant consent form_____	79
Appendix 3: 24 hour dietary recall form_____	86

Abbreviations

FAO	Food and Agricultural Organization of the United States
g	Grams
EAR	Estimated Average Requirements
MOH	Ministry of Health
NHANES III	National Health and Nutrition Examination Survey
NNS08/09	New Zealand National Nutrition Survey 2008/09
NRV	Nutrient Reference Values
NZ	New Zealand
UL	Upper Limit
WHO	World Health Organization