



Meals for Independence and Rehabilitation Programme

A collage of various people, including children and adults, in different settings like a classroom and a library, serving as a background for the slide.

Meals for Independence and Rehabilitation Programme (MIRP)

An intensive meal programme for community dwelling older people at risk of malnutrition

Kaye Dennison, MOW Project Coordinator
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The Issue



Background

- Under nutrition is common in older people, associated with ↑ frailty, ↓ health outcomes, ↑ health costs Aust & NZ Soc Geriatric 2007
- Close correlation between Nutrition and Health Related Quality of Life Amarantos 2001
- Audit of AT&R Wards – under nutrition in older people 24% malnourished, 44% at risk. Van Lill 2001
- Audit of 50 MOW recipients and consultation with older Maori and Pacific People. Dennison 2006/7
- Audit of MOW portion sizes against MOW specifications. Dennison 2006/7

MOW Recipients Food Consumption

- Eating all meal (68% main course, 84% pudding)
- Eating AM & PM snacks - 50%
- Eating fruit in addition to MOW (56% have one or less pieces of fruit/day)
- Eating vegetables in addition to MOW (82% rely on MOW vegetables only)
- 38% split MOW between Lunch & Dinner

Audit of 50 MOW recipients and consultation with older Māori and Pacific People. Dennison 2006/7



The difference between nutrients required and provided

50kg older person	Protein grams	Energy kJ	Energy Kcal
Required	0.8 - 1.2 g/kg (40-60 g protein)	7,560-9,240kJ	1,800-2,200 kcal
Provided by MOW* *NZ MOH Service Specs 2002	18 g/day	2,520 kJ / day	600 kcal
Deficit	22- 42 g/day	5,040 – 6,900kJ /day	1,200 – 1,600kcal



Meals for Independence and Rehabilitation Programme (MIRP)

A pilot project conducted in CMDHB urban area in 2007
Approved by Northern Regional Ethics Committee Y

Aim of Study

To establish if an intensive nutrition program
for older people at “high risk” of or suffering from
malnutrition, is practical to deliver and
will improve their:
nutritional status
functional ability
quality of life



Project Purpose

- Educate
- Empower
- Demonstrate
- Reduce MOW dependence

Who was eligible?

- Individuals 65 years and over
- Living independently
- Malnourished or “at risk” of malnutrition
- Ability to set goals
- Normal diet



Method

ASSESSMENT TOOLS

- Mini Nutritional Assessment Screen (MNA®)
- EuroQuol – Quality of Life
- Nottingham Extended ADLs
- Weight
- Researcher administered questionnaire

6 Week Intensive Meal Program

Week	Breakfast	Weekday Lunch	Weekday Evening	Weekend
1		MOW Main Course and Dessert	Chilled snack meal	Frozen meals for lunch and dinner
2		MOW Main Course and Dessert	Chilled snack meal	Frozen meals for lunch and dinner
3		MOW Main Course and Dessert	Chilled snack meal	
4		MOW Main Course and Dessert	Chilled snack meal	
5		MOW Main Course and Dessert		
6		MOW Main Course and Dessert		

Dietetic Input

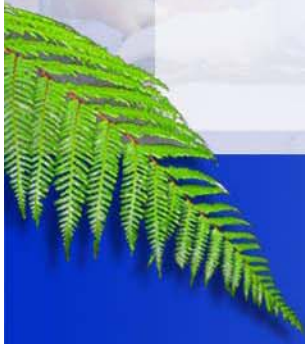
- Completed assessments
- Prescribed nutritional supplements if required
- Weekly or fortnightly visits as required for
 - education
 - motivation
 - weight monitoring
 - review of goals
 - transition off program



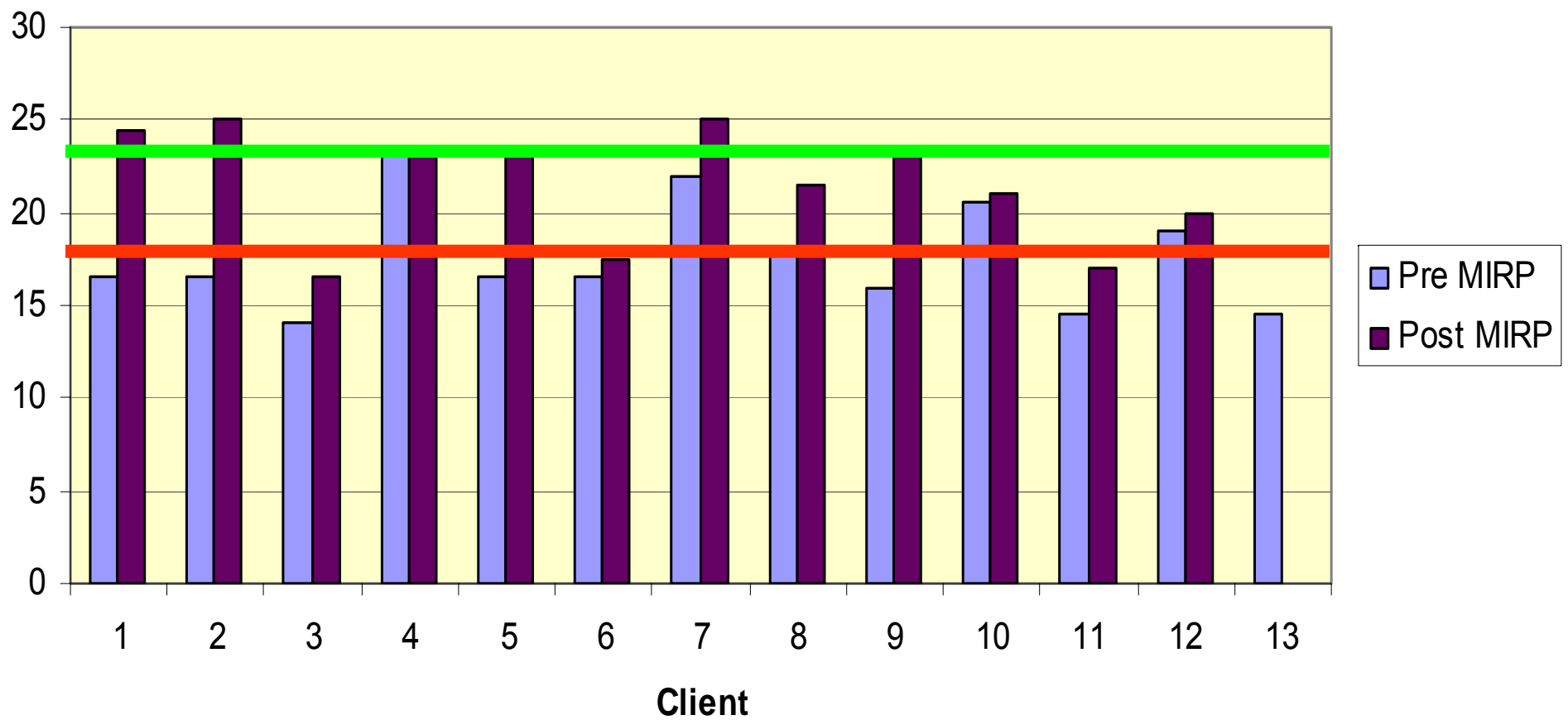
Results

Demographics

- N=13 (1 lost to follow-up)
- Mean age 79.21 (67-98 yrs)
- Sex – 4 males 9 females
- Ethnicity (10 European, 2 NZ Māori, 1 Cook Island Māori)
- Living situation - 10 Living alone
- COPD (45%) Stroke (24%) FTT (15%)



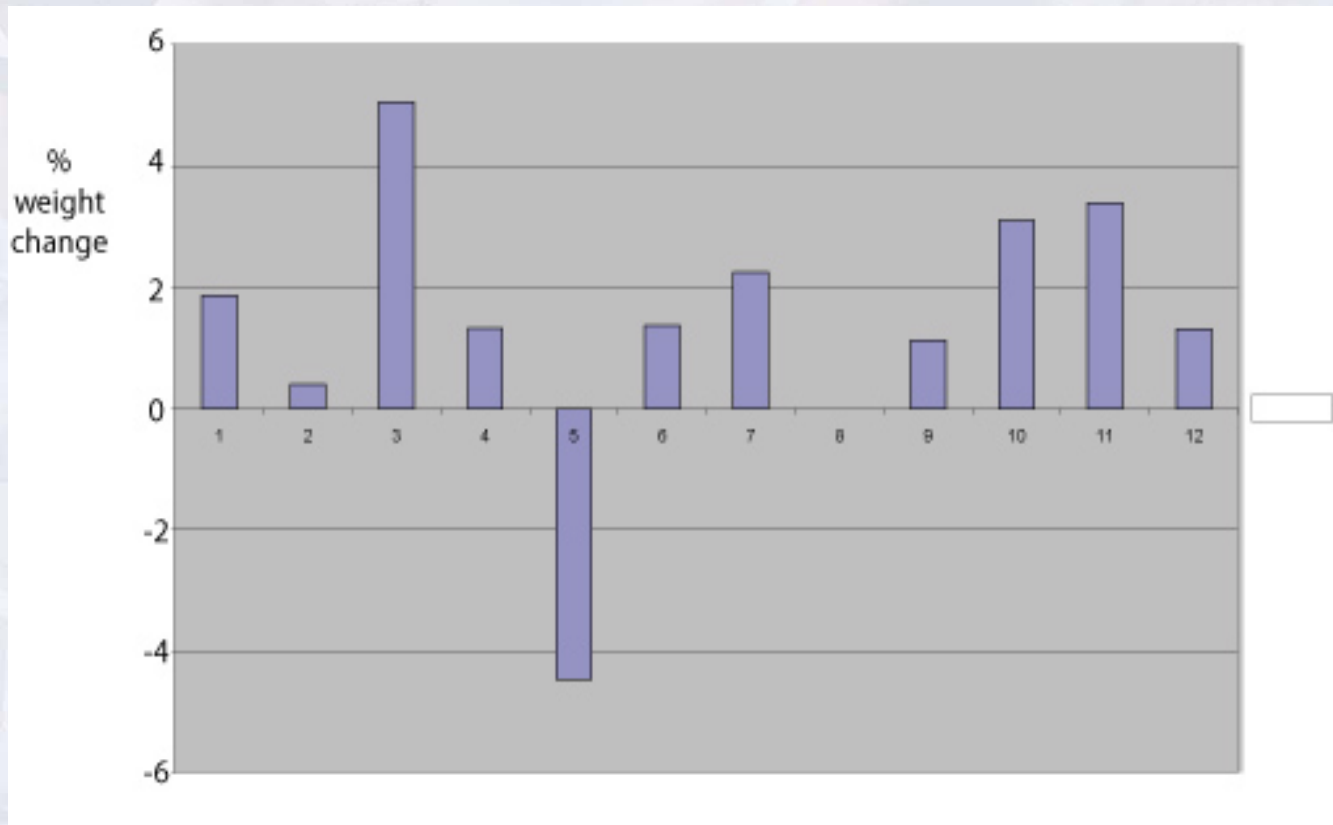
Nutritional Status MNA Scores pre and post MIRP



Function and QOL assessments

Assessments	Pre (Mean)	Post (Mean)	Optimum Score
Nottingham EADL	42.15	44.39	66
Euroquol	11.59	10.56	6

Weight Change Post MIRP (3.6% average wt gain)



Hospital admissions and MOW independence

Hospital Admissions (June - October 2007)	1
Independent of MOW	7 (58%)
MOW long term (3 COPD) (98yr old)	4 (34%)
*Participant anticipated transition off MOW post surgery (Hip replacement)	1

Participant feedback

Did the programme increase your knowledge of your nutritional needs?

75% agreed

Do you have a better understanding of how to meet your future nutrition needs?

100% agreed

Could you continue with meal suggestions?

100% agreed

Cost per person for 6 week Programme

Meals, education, resources	\$ 246
Time (Dietitian) 4 hrs	\$ 200 (includes travel)
Therapy assistant 7 hrs	\$ 140 (includes travel)
Total	\$ 586*

* Does not include travel costs

Acute Hospital
(Medical ward) **\$700 - 800 /day**

Conclusions

- MIRP could help prevent hospital admissions
- Simple and cost effective
- Educates, Empowers
- Reduces MOW dependence
- Improves nutritional status, function and QOL

Recommendations

- Promote the MIRP program in other areas of CMDHB
- Incorporate the programme in a Multidisciplinary Team Falls Prevention - OT assessments
- Introduce Dietetic Therapy Assistant –role in education & monitoring
- Produce a MOW Booklet with a multidisciplinary approach
- Develop Māori and Pacific MOW menu

Limitations

- Small sample
- No control group
- Lead investigator completed assessments and provided intervention



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