

# A Big Issue



## A review of the outpatient weight reduction service provided by WDHB Nutrition and Food Services

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### Introduction

One in three New Zealand adults are overweight, and one in five are obese<sup>1</sup>. These statistics are significantly worse within Maori and Pacific Island groups.

The multi-faceted causes of obesity make it a difficult area to initiate and maintain recommended levels of successful weight reduction. There is some evidence that group interventions may have lower attrition rates<sup>2</sup>. Nutrition education and physical activity are important, but it is only recently acknowledged that a greater emphasis should be placed on behaviour modification and psychological perspectives for all population groups<sup>3</sup>.

Due to increasing service demand and limited resources there is a need for Nutrition and Food Services to evaluate the most appropriate approach to providing weight reduction services.

### Objective

Compare two modified approaches to weight reduction with the historical standard treatment provided by Nutrition and Food Services in order to identify potential areas for improvement.

### Method

A combined retrospective and prospective audit was conducted. Subjects consisted of three groups:

**(P1)** Traditional nutrition education based on macronutrients. Participants randomly selected from 799 clients who attended individual weight reduction appointments at North Shore and Waitakere outpatient clinics between 2002-2008.

**(P2)** Motivational interviewing, behavioural change and nutrition education. Participants living in the North Shore catchment area who were referred between June - September 2008 were offered weekly group weight reduction appointments over a period of four weeks

**(P3)** Motivational interviewing, behavioural change and nutrition education. Participants living in the North Shore catchment area who either declined group sessions or were referred after September 2008 were offered individual weight reduction appointments of a revised format over a set shorter time period as determined by client preference and clinical judgement.

Comparison was made between the three groups in terms of demographics, attendance rates, weight loss and session content.

## Results

Table 1. Demographics

	P1		P2		P3
	All	Attended ≥ 2 visits	All	Attended ≥ 2 visits	
n	18	10	16	7	10
Mean age (y)	50	49.1	36	41	50
% Male	44	45	20	29	50
Ethnicity					
NZEO (%)	50	60	87	86	70
NZ Maori	11	20	0	0	10
Pacific Island	16	10	7	0	10
Other	28	10	7	14	10

•Mean number of visits for P1 = 2.7 (range 1-14). Mean time between visits was 3 months (range 1-15)

•Mean number of visits for P2 = 3.7 (range 3-4). Mean time between visits was 1 week.

•2/10 participants in P3 were seen for ≥ 2 visits. Neither had been discharged at the time of printing, therefore this data was not used for comparison. 3/10 were discharged as weight reduction was not their current priority. 5/10 are still awaiting follow-up.

•Nutrition and Food Services was unable to provide weekly-fortnightly follow-up for P3 for a variety of reasons including booking and scheduling issues and patient preference.

•Retention in P1 reduced by 78% over 4 visits (see Figure 3).

•After a high initial decline rate, retention in P2 remained stable at 93% (see Figure 3).

Figure 3. Attendance Rates

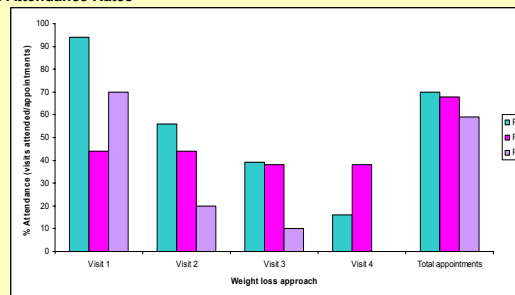
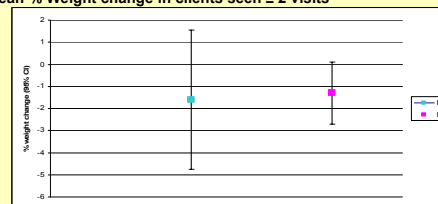


Figure 1. Mean % Weight change in clients seen ≥ 2 visits



•P1 had a mean 1.7% weight reduction compared to 1.3% in P2. There was no statistically significant difference between either group (see Figure 2).

### Discussion

Low numbers of Maori and Pacific Island participants likely reflect the demographics of the North Shore area. Referrals for this group may also be directed to the number of community-based Maori and Pacific Island weight reduction initiatives that have received funding over recent years. Data collection for Waitakere is currently in progress which is likely to reflect the demographics of the Waitakere area.

It is difficult to compare actual weight lost between the groups due to confounding variables such as number of times seen over widely varying time periods, as well as the number and difference in co-morbidities in referrals received by Nutrition and Food Services.

In terms of clinician time effectiveness, the group sessions are an ideal method of reaching a number of patients at once and reduce the impact of individual DNAs. This is also the only group in which the majority of patients brought along a support person/family member, thereby effectively reaching a larger number of people.

Feedback from participants in P2 and P3 regarding session content rated behavioral change strategies as "very useful" or "useful".

### Conclusion

Current evidence supports a multi-faceted approach to weight reduction including nutrition, physical education and behavior modification strategies delivered in a timely fashion. Providing individual, behaviour modification strategies with intensive follow-up is no more effective, or accepted by our population and is in fact not a realistic option within the constraints of a public health-based weight reduction service. Results to date show a positive direction for weight reduction outpatient clinics, and on-going review and analysis will help to define future service delivery.