



Australia's National
Science Agency

Member Refund Incentive

A secondary analysis of data from the Total Wellbeing Diet platform

Gilly Hendrie and Danielle Baird

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Background

In January 2015, the refund incentive was introduced to the CSIRO Total Wellbeing Diet. If members finish the program and meet the science-based criteria, such as weighing in each week and uploading a photo to help track their progress and using the food diary 3 times per week, they can claim a refund for the \$199 membership fee. Our previous research in 2018 found that about one in five members who completed the program claimed the refund. It also showed that the financial incentive of the refund and the personal accountability, reinforced through the refund criteria, were the important motivators for members and improved weight loss. Among the 13000 Total Wellbeing Diet members analysed previously, this 'commitment contract' was associated with greater weight loss, greater satisfaction, and increased feelings of success.

Four years on, we were interested to explore how many members claim the refund and whether claiming the refund is still associated with greater weight loss among members. This analysis was conducted in a sample of over 48,000 members who have completed the 12-week CSIRO Total Wellbeing Diet since 2015.

Results

Percentage of members claiming the refund

Since the introduction of the refund incentive for the Total Wellbeing Diet, a total of 12951 members have claimed the refund, which represents 27% of members who have completed the program – or about one in four members.

The demographic characteristics of members who claimed the refund were like those who did not claim the refund. The starting weight and BMI of members was similar regardless of whether they claimed the refund or not (Table 1). The only difference was that members who received the refund were slightly younger than those who did not claim the refund (mean age 48 vs 51 years).

Table 1. Demographic characteristics of members who finished the program, by refund status (n=48494).

		Refund (n=12951)		No refund (n=35543)		Total (n=48494)	
Gender	Female	10476	80.9%	28497	80.2%	38973	80.4%
	Male	2475	19.1%	7046	19.8%	9521	19.6%
Age group	18-30 years	1189	9.2%	1989	5.6%	3178	6.6%
	31-50 years	5908	45.6%	14026	39.5%	19934	41.1%
	51-70 years	5474	42.3%	17799	50.1%	23273	48.0%
	71 years+	376	2.9%	1697	4.8%	2073	4.3%
	Missing	4	0.0%	32	0.1%	36	0.1%
Socioeconomic Status (SEIFA)	First quintile: Most disadvantaged	1263	9.8%	3451	9.7%	4714	9.7%
	Second quintile	1874	14.5%	5166	14.5%	7040	14.5%
	Middle quintile	2531	19.5%	6796	19.1%	9327	19.2%
	Forth quintile	3018	23.3%	7641	21.5%	10659	22.0%
	Fifth quintile: Least disadvantaged	4165	32.2%	12129	34.1%	16294	33.6%
	Missing	100	0.8%	360	1.0%	460	0.9%
Weight status	Normal weight	752	5.8%	1780	5.0%	2532	5.2%
	Overweight	4509	34.8%	12018	33.8%	16527	34.1%
	Obese	7689	59.4%	21724	61.1%	29413	60.7%
	Class 1 Obese	4240	32.7%	11779	33.1%	16019	33.0%
	Class 2 Obese	2105	16.3%	6064	17.1%	8169	16.8%
	Class 3 Obese	1344	10.4%	3881	10.9%	5225	10.8%
	Missing	1	0.0%	21	0.1%	22	0.0%

Is claiming the refund associated with greater weight loss?

Members who claimed the refund lost 2.9kg in the first 3 weeks compared to 2.6kg for those who did not end up claiming the refund at the end of the program (3.2 vs 2.8% of starting body weight respectively).

The weight loss among members who finished the program and received the refund was 6.2kg (or 6.7% of starting body weight) compared to 4.8kg (or 5.2% of starting body weight) for those who did not claim the refund. This is equivalent to a 28% greater weight loss in those who claimed the refund (Table 2).

Table 2. Weight loss at week 3 and week 12 of members who finished the program, by refund status (n=48494).

		Refunded	No refund
Week 3	Kilograms	2.9	2.6
	Percentage of starting weight	3.2	2.8
Week 12	Kilograms	6.2	4.8
	Percentage of starting weight	6.7	5.2

Male members who received the refund lost an average of 8.1kg, equivalent to 7.9% of their starting body weight. This was the highest percentage body weight lost among all demographic subgroups. However, comparing refunded to non-refunded members, refunded female members (30% more), those aged 31-50 years (32% more) and those who were least disadvantaged (30% more) lost relatively more weight than those who did not claim the refund (Table 3).

Table 3. Weight loss by demographic characteristics of members who finished the program, by refund status (n=48494).

		Refund (n=12951)		No refund (n=35543)		Total (n=48494)	
		Kilograms	Percentage	Kilograms	Percentage	Kilograms	Percentage
Gender	Total	6.2	6.7	4.8	5.2	5.2	5.6
	Female	5.7	6.4	4.4	5.0	4.7	5.4
	Male	8.1	7.9	6.6	6.3	7.0	6.7
Age group	18-30 years	5.6	6.2	4.5	4.9	4.9	5.4
	31-50 years	6.0	6.5	4.5	4.9	5.0	5.4
	51-70 years	6.4	7.0	5.0	5.5	5.4	5.9
	71 years+	6.4	7.2	5.3	5.8	5.5	6.0
SEIFA	First quintile	6.5	6.8	5.1	5.4	5.5	5.7
	Second quintile	6.4	6.9	5.0	5.4	5.4	5.8
	Middle quintile	6.2	6.7	5.0	5.4	5.3	5.7
	Forth quintile	6.2	6.7	4.9	5.3	5.3	5.7
	Fifth quintile	5.9	6.6	4.5	5.0	4.9	5.4
Weight status	Normal weight	3.6	5.4	2.8	4.2	3.1	4.6
	Overweight	5.3	6.6	4.1	5.1	4.4	5.5
	Obese	6.9	6.9	5.4	5.4	5.8	5.8
	Class 1 Obese	6.4	7.0	5.0	5.4	5.4	5.8
	Class 2 Obese	7.2	6.9	5.6	5.4	6.0	5.8
	Class 3 Obese	8.1	6.5	6.3	5.1	6.8	5.5

Overall, 67% of members who claimed the refund lost 5% or more of their starting body weight compared to 50% of members who did not claim the refund (Table 4).

Table 4. Percentage of weight loss, in categories, of members who finished the program, by refund status (n=48494).

	Refunded		No refund	
	Count	%	Count	%
No weight loss	115	0.9%	2846	8.0%
Zero to <5%	4201	32.4%	14774	41.6%
5 to <10%	6442	49.7%	14271	40.2%
10% or more	2193	16.9%	3652	10.3%
<i>Subtotal: 5% or more</i>	<i>8635</i>	<i>66.7%</i>	<i>17923</i>	<i>50.4%</i>

Summary

The key findings for weight loss success of refunded members were:

- About 1 in 4 members who finish the program now claim the refund.
- Members who claimed the refund lost about 28% more weight than who did not claim the refund. On average refunded members lost 6.2kg (or 6.7% of their body weight) compared to 4.8kg (or 5.2% body weight) for non-refunded members.
- Two thirds of members who claimed the refund lost a clinically relevant amount of weight (>5% of starting body weight), compared to half of the non-refunded members.

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Contact us

1300 363 400
+61 3 9545 2176
csiro.au/contact
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