

## Introduction

Evidence suggests that lifestyle modification programs have great potential to help individuals who are overweight or living with obesity to achieve weight loss. However, the evidence is inconclusive regarding who is more likely to achieve weight loss. The *Life!* program is one of the largest lifestyle modification programs in Australia. The program offers group-based intervention sessions (hereafter *Life!* Group Course) for individuals at risk of type 2 diabetes and/or cardiovascular disease (CVD). One of the main program goals is to help participants achieve at least a 5% weight loss.

The *Life!* Group Course consists of a one-on-one Introductory Session (baseline) and five group-based intervention sessions over six months.

## Study Objectives

1. Investigate the effects of the *Life!* Group Course on improving participants' weight.
2. Explore whether participants with specific characteristics were more likely to achieve the weight loss goal.

## Materials and Methods

**Study design:** Pre-, post intervention design.

**Participants:** Community-based individuals (age ≥ 18 years old) at risk of type 2 diabetes and/or CVD attending the *Life!* Group Course in the 2020–21 financial year.

**Outcome measures:** Weight at baseline and Session 5 (within 6 months) and achievement of the weight loss goal.

**Data analyses:** Paired t test, logistic regression.

## Results

### Weight loss over six months

- Baseline vs. 6-month weight (87.0 kg vs. 84.6 kg; weight loss 2.4 kg; 95% CI: -2.7 kg to -2.0 kg;  $p < 0.001$ ).

### Achievement of weight loss goal over six months

- In total 21.8% (n=132) of participants achieved a 5% weight loss.

**Participants living in disadvantaged LGAs and having a higher AUSDRISK score were more likely to achieve the weight loss goal (see table below):**

	B	odds ratio	95% CI of odds ratio	p value
Not living in disadvantaged LGAs	-0.548	0.578	0.342 - 0.979	0.041
AUSDRISK score	0.071	1.074	1.016 - 1.134	0.011

## Results

In 2020–21, 2588 individuals joined the *Life!* Group Course. At the time of data analysis, 1052 participants were active at or before Session 5, 717 withdrew and 819 completed Session 5. Of those 819 participants, 605 had valid weight data at both baseline and Session 5. The mean (SD) age of participants was 51.5 (13.5) years old, and the mean (SD) AUSDRISK score was 15.3 (5.3). See other demographic information in the table below:

	n (%)		n (%)
<b>Female gender (vs. Male)</b>	453 (74.9)	<b>Born in NES countries</b>	140 (23.1)
<b>Education</b>		<b>Income level</b>	
Bachelor degree or above	167 (27.6)	High	77 (12.7)
Certificate/Diploma	130 (21.5)	Medium	208 (34.4)
High school	47 (7.8)	Low	112 (18.5)
Other	261 (43.2)	Not provided	208 (34.4)
<b>Employment status</b>		<b>Referral channels</b>	
Employed	419 (69.3)	GP	118 (19.5)
Retired	100 (16.5)	Program Provider	92 (15.2)
Unemployed	22 (3.6)	Health Professional	25 (4.1)
Other	64 (10.6)	Self-referral	370 (61.2)
<b>Marital status</b>			
Married/de facto	325 (53.7)	<b>From metro area (vs. regional)</b>	494 (81.7)
Single	104 (17.2)	<b>Non-smoker</b>	578 (95.5)
Unknown	176 (29.1)	<b>From low SES LGAs</b>	172 (28.4)
<b>Non-Aboriginal background</b>	593 (98.0)	<b>From disadvantaged LGAs</b>	228 (37.7)

**Note:** Participants' risk of type 2 diabetes was assessed using the Australian type 2 diabetes risk assessment tool, with a score ≥ 12 indicating at risk; LGA: Local Government Areas; SES: Socio-economic status; NES: Non-English-Speaking countries.

## Conclusions

- The research findings demonstrate that the *Life!* Group Course is effective in improving participants' weight over six months.
- Strategies are needed to explore how the program can help more participants achieve the weight loss goal.
- Further investigation is needed to understand why participants living in disadvantaged LGAs and at higher risk of type 2 diabetes and/or CVD at baseline are more likely to achieve the weight loss goal over six months.

## Acknowledgement

The authors would like to acknowledge the Victorian Department of Health for funding support, and the support of the central *Life!* team, *Life!* program providers (external workforce) and *Life!* participants.

## Contact Information

Dr Emily You, Evaluation Coordinator  
Prevention and Health Promotion, Diabetes Victoria

03 8648 1803 | [eyou@diabetesvic.org.au](mailto:eyou@diabetesvic.org.au)  
[www.lifeprogram.org.au](http://www.lifeprogram.org.au)