

CSIRO Total Wellbeing Diet Online: Member Survey

Survey highlights: Understanding the health impacts of the program

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Background 1

Impacts of obesity 1.1

Overweight and obesity remain significant issues in Australia. Most of the Australian adult population are overweight or obese, with significant social and economic costs to the Australian economy.

Obesity is an independent risk factor for heart disease, diabetes, sleep apnoea, and arthritis, among other conditions. With significant weight loss, symptoms and risk of chronic disease can decrease.

The Total Wellbeing Diet Online is a 12-week weight loss program which has helped many Australians lose weight. Through previous research we have found that the Total Wellbeing Diet members lose an average of 5.6% of their body weight – which can have significant impact on their health and wellbeing more broadly. However, we have not ever captured information on these broader impacts of the program.

Therefore, the aim of this research was to understand the self reported impacts experienced by the Total Wellbeing Diet Online members including weight loss, and changes to physical, psychological and social health associated with completing this online weight loss program.

Key objectives 1.2

In members who had completed at least 12 weeks of the CSIRO Total Wellbeing Diet Online program, this study aimed to understand:

- What were the most common health conditions experienced by members?
- How do members perceive their health condition or general health changed as a result of completing the Total Wellbeing Diet Online program?
- Did members' medication for these conditions change at all as a result of the Total Wellbeing Diet Online program?
- Were changes in health associated with members' weight when they started the program or with their weight loss on the Total Wellbeing Diet Online program?

2 Method

A survey was developed using a mix of pre-existing validated scales, commonly used questions, and some questions specifically developed for this survey. The survey protocol was approved by the CSIRO Health and Medical Research Ethics Committee (2019 041 LR).

The study survey was emailed to a database of approximately 50,000 past or present members of the Total Wellbeing Diet Online. An explanation of the study was provided in the email, with an invitation to participate and a link through to the survey. The survey took about 10-15 minutes to complete depending on branching logic and the individual's speed.

To complement the survey data, SP Health provided the CSIRO research team with a de-identified data file from the online platform that included sex, age, membership status (current or past), length of membership, and other program specific information including baseline and final weight.

Survey data were analysed at a group level using general descriptive statistics (frequencies, means and percentages). Some subgroup analysis was conducted to understand whether health conditions varied by characteristics such as starting weight status or weight lost on the program. The survey also contained open ended questions which were analysed to identify key themes using standard thematic analysis methodology.

A total of 3082 surveys were completed with 5 respondents excluded due to outlier weight, height or age data leaving 3077 surveys for analysis.

3 **Key findings**

Data were analysed from 3077 respondents of a survey about the health impacts of the Total Wellbeing Diet Online. 65% of members started the Total Wellbeing Diet Online program for concerns about their health and half wanted to improve their appearance. In doing the Total Wellbeing Diet Online, 67% felt they had been successful on the program and 64% were satisfied with their weight loss.

What were the most common health conditions experienced by survey respondents?

- The most common health conditions experienced were arthritis (41%), high blood pressure (42%) and high cholesterol (43%). 32% of respondents reported to have mental health illness or depression.
- The levels of obesity among those with Type 2 diabetes (87%), sleep apnoea (83%) and prediabetes (78%) was higher than the survey respondents generally.
- Obese respondents were also more likely to report multiple health conditions. 50% of obese respondents reported 3 or more health conditions vs 27% of normal weight respondents.

How do members perceive their health condition or general health changed as a result of completing the Total Wellbeing Diet Online?

- Survey respondents reported most improvement in their prediabetes and type 2 diabetes since starting on the Total Wellbeing Diet Online.
- More than half of those who reported having prediabetes (59%), Type 2 diabetes (55%), and high cholesterol (51%) reported some improvement (a little or a lot) in their condition since starting on the Total Wellbeing Diet Online. 48% of respondents with high blood pressure and 46% of respondents with mental illness also reported some improvement in their condition since starting the Total Wellbeing Diet Online.
- The other areas of health where respondents commonly reported improvements were in their energy levels (63% of survey respondents), physical activity levels (58%), and their health generally (55%).

Did members' medication for these conditions change at all as a result of the Total **Wellbeing Diet Online?**

- Respondents were most commonly taking medication for high blood pressure, depression or other mental illness, high cholesterol and asthma. But it was most common for them to report having stopped or reduced their medication for mental illness, asthma and arthritis.
- 51% of those taking medication for mental health illness reported to have reduced or stopped their medication since starting the Total Wellbeing Diet Online, saving them, on average, \$15 dollars per month. However, few attributed this reduction to the Total Wellbeing Diet Online.
- It was most common for respondents to attribute their change in medication for type 2 diabetes (55% of 38 respondents) and high blood pressure (56% of 193 respondents) to the Total Wellbeing Diet Online. Changes in medication to type 2 diabetes reported saved respondents about \$18 per month. Respondents estimated the reduction in medication for arthritis and sleep apnoea also saved them about \$18 per month.

Self reported cost savings differed depending on weight and health status. Savings from medication of obese respondents with 3+ conditions was approx. \$39 per month on average per condition, which is about \$460 annually.

Were changes in health associated with weight loss on the Total Wellbeing Diet Online?

- Respondents who had lost most weight with the Total Wellbeing Diet Online also reported feeling most successful in doing the program and most satisfied with their weight loss from following the program.
- Those who lost the most weight with the Total Wellbeing Diet Online reported the greatest improvements in their health conditions. For example, 81% of respondents in the highest weight loss group felt their type 2 diabetes had improved compared to 35% of respondents in the lowest weight loss group. Likewise, for high blood pressure (77% vs 29%) and high cholesterol (78% vs 36%) a greater proportion of those in the highest weight loss group felt their condition had improved since starting the Total Wellbeing Diet Online.

3.1 What else did respondents tell us?

- People have gained knowledge and skills from doing the Total Wellbeing Diet Online, and felt the recipes, meal plans, tracking tools and shopping lists really helped them to lose weight. These elements of the program also appeared to help people enjoy their food more and feel good about themselves in the process.
- 46% of respondents with mental illness reported some improvement in their condition since starting the Total Wellbeing Diet Online. However, many also reported improvements in their general mental wellbeing in the form of self confidence, satisfaction, mood, and body image.

3.2 Considerations and limitations

This report presents the findings from a survey of the Total Wellbeing Diet Online members. Data was provided by members who responded to an email and volunteered to complete an online survey about the health impacts they experienced since embarking on the program. As with many health-related surveys, females were more likely to participate in the survey than men and made up most of the sample.

Given the nature of the sample and self reported information, there is likely to be bias in the responses and these findings should be interpreted with caution. Participants who completed the survey were likely to be more health conscious, and possibly more likely to have experienced health benefits from the program than the general population. However, over 3,000 people completed the survey which is considered adequate to gain an understanding of impacts of the Total Wellbeing Diet Online program on health and wellbeing.

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