

Nutrition education for weight control among adults:
Coping strategies for overeating
Misa Shimpo

Introduction

It is important to maintain a healthy weight to prevent non-communicable diseases. However, individuals occasionally face the temptation to overeat. It is particularly difficult for those with high impulsivity to resist temptation because the satisfaction of desire tends to be a top priority. Therefore, strategies for coping with the aftermath of dietary lapses, as well as for resisting temptation are important.

The objective of this study was to examine strategies for coping with the aftermath of dietary lapses, paying special attention to the influence that an individual's impulsivity might have on the use of these strategies. These results can provide suggestions for a new nutrition education program. Finally, based on our findings, we developed new educational materials to support the use of these coping strategies.

Study 1. Correlations between impulsivity and overeating by age group and sex among Japanese adults

The objective of this study was to examine the correlations between self-reported impulsivity and the frequency of overeating by age group and sex. Eight hundred adults (20–59 years, 400 men, 400 women) who were registered with Rakuten Research, Inc. completed self-reported cross-sectional questionnaires. The questionnaire included items on impulsivity and the frequency of overeating. Impulsivity was positively correlated with the frequency of overeating among both men and women. In particular, impulsivity was strongly related to the frequency of overeating among men in their 20s.

Study 2. The development of an Aftermath of Dietary Lapses Coping Questionnaire for weight control

Study 1 suggested that impulsivity and frequency of overeating were positively related. Those with high impulsivity find it difficult to resist temptation because these individuals have a strong tendency to act to satisfy their desires. This may suggest that strategies for coping with the aftermath of dietary lapses are suitable aids to weight control for those with high impulsivity. The objective of this study was to examine strategies for coping with the aftermath of dietary lapses and to develop a questionnaire to evaluate how people cope with dietary lapses during weight control.

Study 2-1. Qualitative study of strategies for coping with the aftermath of dietary lapses

The objective of this study was to examine strategies for coping with the aftermath of dietary lapses. Eighteen participants undergoing weight control were administered a self-reported questionnaire. The coping strategies were categorized by content. After analyzing the responses, five categories were obtained.

Study 2-2. Reliability and validity of the Aftermath of Dietary Lapses Coping Questionnaire

We developed a questionnaire consisting of 20 items to evaluate how respondents coped with the aftermath of dietary lapses. The objective of this study was to examine the reliability and validity of the Aftermath of Dietary Lapses Coping Questionnaire. The participants were dietitians working at public health centers and city offices in Sizuoka. Data from 411 participants (75 men and 336 women) were analyzed. The results of confirmatory and exploratory factor analyses suggested that five factors (i.e., self-reflective thoughts, compensation by healthy eating, compensation by exercising, self-monitoring, and positive thoughts), collectively consisting of 17 items, reached nearly acceptable levels of validity and reliability.

Study 3. The influence of coping strategies on weight control in the aftermath of dietary lapses in a high impulsivity group

The objective of this study was to examine methods of weight control, focusing on coping with the aftermath of dietary lapses among those with high impulsivity. Eight hundred adults who were registered with Rakuten Research, Inc. completed a self-reported cross-sectional questionnaire. The high impulsivity group reported using more coping strategies. The main finding of this study was that compensation by healthy eating was negatively correlated with BMI in the high impulsivity group. This suggests that, overall, individuals who frequently compensated by healthy eating in the high impulsivity group had a lower BMI.

Study 4. The development of “Resist your temptations for weight control” flipchart-based educational materials

These studies suggested that coping strategies served as important tools for weight control among those with high impulsivity. However, there is a lack of educational materials that focus on coping with the aftermath of dietary lapses. The objective of this study was to develop educational materials concerning temptations, coping strategies for resisting these temptations, and coping strategies for dealing with the aftermath of dietary lapses.

Study 4-1. The development and the feasibility of “Resist your temptations for weight control” flipchart-based educational materials

The objective of this study was to develop educational materials and establish their feasibility. The materials consisted of flipcharts, worksheets, and a diary of temptations, which was used to record daily food temptations (e.g., unhealthy or calorically dense foods that may interfere with weight control) and how participants responded to them. A class for weight control was held to confirm the feasibility of these educational materials. Sixteen

participants answered a self-reported questionnaire to evaluate the educational materials after the class. The follow-up survey was conducted to assess the participants' performance of coping strategies one month later. The results suggested that the materials helped participants understand the coping strategies and participants had positive opinions about practicing the strategies. However, few participants reported actually performing the copings one month later. Most participants endorsed negative opinions of the diary of temptations.

Study 4-2. The revision of "Resist your temptations for weight control" flipchart-based educational materials

The objective of this study was to revise the educational materials to address the problems encountered in Study 4-1 and to create the final edition. Four dietitians were asked to assess the materials. Based on their feedback, the materials were then revised again. Ultimately, the final edition was completed, and it included flipcharts, work sheets, a diary of temptations, a sheet of coping strategies, and a guide for educators.

Conclusions

This study examined strategies for coping with the aftermath of dietary lapses and suggested that they are an important aid to weight control among those with high impulsivity. In addition, educational materials focusing on temptations, coping strategies for resisting temptations, and coping strategies for dealing with the aftermath of dietary lapses were developed and their feasibility was confirmed. It is important to maintain one's weight in the long-term. Future studies should examine the long-term effects of using strategies for coping with the aftermath of dietary lapses.