Investigation of weight-loss expectations and weight control in obesity

A. McConnon, M. Raats and R. Shepherd
Food, Consumer Behaviour and Health Research Centre, Department of Psychology, University of Surrey, Guildford GU2 7XH, Surrey, UK

The aim of the present abstract is to report on obese individuals’ weight-loss goals and factors influencing these goals. Current guidelines recommend a target weight loss of 5–10% of original weight for successful weight control\(^1\). However, research has shown that this level is a great underestimation of what obese individuals consider as successful or acceptable weight loss\(^2\). Unmet goals or expectations in weight control can lead to negative behaviours and psychological profiles, and ultimately abandonment of weight-control efforts.

Data reported here were collected as part of the EU 6th Framework project DiOGenes, a dietary intervention trial investigating the effectiveness of high- and low-GI and -protein diets on weight maintenance, following a rapid weight-loss period, in an obese cohort. Participants were asked to indicate their target weight in kilograms in a questionnaire completed at the screening phase. A target weight-loss score was then calculated by subtracting self-reported target weight from baseline weight.

Target weight-loss scores ranged from +11 kg to −88.6 kg and were highly correlated with baseline weight (\(r = 0.73, P < 0.001\)), weight loss during the rapid weight-loss period (\(r = 0.40, P < 0.001\)) and during the weight-maintenance phase of the study (\(r = 0.15, P = 0.001\)). On average these target weights corresponded to a 25% weight loss or a mean weight loss of 25 kg, with only 3% of the sample setting a target weight loss of ≤10%. Weight loss necessary to reach the target weight was largely in excess of actual weight change during the rapid weight-loss period (−11 kg vs. −25 kg; \(P < 0.001\)) and overall weight change accounting for initial weight loss (0.05 kg vs. −25 kg; \(P < 0.001\)). Differences in target weight-loss scores for gender and age were shown to be significant. Women had a significantly higher score than men (\(P < 0.01\)) and age was shown to be highly correlated (\(r = 0.11, P = 0.01\)) with target weight-loss score. Regression analysis investigated the influence of gender, age, baseline weight, weight at age 20 years and weight at age 30 years on target weight-loss score. All variables were shown to significantly predict target weight-loss score, with the model explaining 72% variance (\(P < 0.001\)).

Target weight-loss scores were significantly negatively associated with baseline weight and positively associated with weight change, indicating that individuals with greater weight loss had higher target weight-loss scores. Women and older participants had higher weight-loss expectations and target weight-loss scores were significantly predicted by previous weight history and baseline weight. Overall, this analysis reveals high weight-loss expectations in this cohort and after the intervention period target weight-loss scores were not achieved. Encouraging acceptance of realistic target weight losses in obesity management may lead to more successful treatment of obesity.