Investigation of weight-loss expectations and weight control in obesity

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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 \((-11 kg v. -25 kg; P < 0.001)\) and overall weight change accounting for initial weight loss \((0.05 kg v. -25 kg; P < 0.001)\). 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.