



ELSEVIER

REVIEW

Self-weighing in weight management interventions: A systematic review of literature

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Summary

Background: Self-weighing increases a person's self-awareness of current weight and weight patterns. Increased self-weighing frequency can help an individual prevent weight gain. Literature, however, is limited in describing variability in self-weighing strategies and how the variability is associated with weight management outcomes. **Aim:** This review analyzed self-weighing in weight management interventions and the effects of self-weighing on weight and other outcomes.

Methods: Twenty-two articles from PubMed, CINAHL, Medline, PsychInfo, and Academic Search Premier were extracted for review.

Results: These 22 articles reported findings from 19 intervention trials, mostly on weight loss or weight gain prevention. The majority of the reviewed articles reported interventions that combined self-weighing with other self-monitoring strategies (64%), adopted daily self-weighing frequency (84%), and implemented interventions up to six months (59%). One-half of the articles mentioned that technology-enhanced or regular weight scales were given to study participants. Of the articles that provided efficacy data, 75% of self-weighing-only interventions and 67% of combined interventions demonstrated improved weight outcomes. No negative psychological effects were found.

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Conclusions: Self-weighing is likely to improve weight outcomes, particularly when performed daily or weekly, without causing untoward adverse effects. Weight management interventions could consider including this strategy.

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Introduction

More than two-thirds of adults in the United States are either overweight or obese [1]. Weight management interventions are needed to help people maintain healthy weight and potentially reduce obesity-related chronic diseases and the costs derived from treating such diseases. Effective weight management interventions that are simple, not costly, and can be easily implemented by the general public would have a great impact on population health. Self-weighing can be easily performed by an individual at home or at

work without much professional help. Self-weighing increases a person's self-awareness of current weight and weight patterns. The awareness can trigger a self-evaluation response involving interpretation of weight data against a goal or a standard, and after self-evaluation a series of actions can take place including self-enforcement or self-adjustment [2–4].

Increased self-weighing frequency can help an individual prevent weight gain. For instance, a previous study found that individuals with an increase in self-weighing frequency within one year gained less weight than those whose self-weighing

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