

Treatment of overweight in children and adolescents: does dieting increase the risk of eating disorders? (Structured abstract)
Centre for Reviews and Dissemination

Database of Abstracts of Reviews of Effects 2012 Issue 4
Copyright © 2012 University of York. Published by John Wiley & Sons, Ltd.

Original article:

[Butryn M L, Wadden T A. Treatment of overweight in children and adolescents: does dieting increase the risk of eating disorders?. International Journal of Eating Disorders. 2005;37\(4\):285-293. Links](#)

CRD summary

This review assessed the effects of dieting on eating behaviour and psychological status in children and adolescents. The authors concluded that programmes do not generally increase eating disorders and do improve psychosocial status. Given that the review methods and the quality of the individual studies were not adequately reported, it is difficult to comment on the strength of the evidence underpinning the authors' conclusions.

Authors' objectives

To assess the effects of professionally administered weight loss programmes on eating behaviour and psychological status in children and adolescents.

Searching

MEDLINE and PsycINFO were searched for studies published in the English language; the search terms were reported. In addition, reference lists were screened.

Study selection: study designs

Inclusion criteria were not specified in terms of the study design. The included studies followed up participants for between 6 months and 10 years.

Study selection: specific interventions

Studies of professionally administered weight loss programmes were eligible for inclusion. Four of the included studies used behavioural family-based or cognitive-behavioural interventions; one study used an in-patient multi-component intervention that involved cognitive-behavioural therapy.

Study selection: participants

Studies of children and adolescents were included. In the included studies, the participants' mean or median age at baseline ranged from 10 to 13 years and the mean baseline body mass index ranged from 25.5 to 33.9 (4 studies).

Study selection: outcomes

Studies that assessed eating behaviour and psychological status were eligible for inclusion. The included studies assessed eating behaviour using different measures: the Eating Disorder Inventory (EDI), Dutch Eating Behavior Questionnaire (DEBQ), Children's Eating Attitudes Test (ChEAT), Kids' Eating Disorder Survey (KEDS), and self-reports of bulimia and anorexia nervosa. The included studies assessed psychological status using the Self-Perception Profile and the Child Behaviour Checklist.

Study selection: how were decisions on the relevance of primary studies made?

The authors did not state how the papers were selected for the review, or how many reviewers performed the selection.

Validity assessment

The authors did not state that they assessed validity.

Data extraction

The authors did not state how the data were extracted for the review, or how many reviewers performed the data extraction. Data on the number of participants recruited and the number followed up in each study were extracted.

Methods of synthesis: how were the studies combined?

The studies were grouped by outcome and a narrative synthesis was undertaken. Each study was described in the text.

Methods of synthesis: how were differences between studies investigated?

Differences between the studies were apparent from descriptions given in the text.

Results of the review

Five studies (n=447) were included. The design of the included studies was unclear; however, four of the studies appear to have had a pre-test post-test design, and one appeared to be a controlled trial.

Effects on eating behaviour (5 studies).

Professionally administered weight loss programmes were associated with a minimal risk of eating disorders. The studies showed a decrease in scores on the external eating subscale and no change in emotional eating on the DEBQ (2 studies). One study showed an increase in restrained eating and one showed no change in restrained eating on the DEBQ. There was a statistical trend towards a reduction in ChEAT scores (1 study), no significant change from baseline on the KEDS (1 study), a significant decrease on the drive for thinness subscale, and no significant change in bulimia measured on the EDI (1 study). One study found 4% of participants reported treatment for bulimia nervosa and none reported treatment for anorexia nervosa over 10 years

Effects on psychological status (4 studies).

The studies showed significant improvements in three of the five assessed areas of self-perceived competence but no significant improvement in global self-worth at 10 months (1 study); significant reductions in symptoms of depression and state anxiety at post-treatment and after 8 months (1 study); and a significant reduction in total behaviour problems after 18 months (1 study). One study found that 12% of the participants had sought treatment for depression during 10 years of follow-up.

Authors' conclusions

Professionally administered weight loss programmes do not generally increase symptoms of eating disorders. They were associated with significant improvements in psychosocial status.

CRD commentary

The review question was clear in terms of the intervention, participants and outcomes. Inclusion criteria were not specified for the study design. The search strategy was not described in full: the dates searched were not reported. Limiting the search to reports published in English and listed in two electronic databases raises the possibility of both publication and language bias. The methods used to select studies and extract the data were not described, so it is not known whether any efforts were made to reduce errors and bias. In addition, validity was not assessed.

A narrative synthesis was appropriate in view of the small number of studies using different methods to assess outcomes over varying time periods. The evidence came from a small number of studies that assessed multiple outcomes; the number of outcomes and subscales assessed in each study was not reported, thus the possibility that positive outcomes were selected cannot be excluded. In addition, values for results in individual studies were not reported. The authors stated that none of the studies used diagnostic criteria for specific eating disorders to assess the outcomes. Hence, evidence of the effects on eating disorders is limited. In addition, as the quality of the included studies and the methods used to conduct the review were not reported, it is difficult to comment on the strength of the evidence underpinning the authors' conclusions.

Implications of the review for practice and research

Practice: The authors stated that concerns about potential harms from dieting should not discourage overweight youth from using sensible methods of weight loss, nor discourage urgently needed public health campaigns to prevent the development of overweight and obesity in children and adults.

Research: The authors stated that further research is required to examine the effects of behavioural weight loss programmes on eating disorders, and that future studies should clearly define and measure disturbances in eating behaviour and mood using, for example, the modification of the Eating Disorder Examination proposed by Bryant-Waugh et al. (see Other Publications of Related Interest). They also stated that long-term studies are required to determine whether overweight teenagers with marked body image dissatisfaction, depression, or other psychiatric disorders, are at greater risk of binge eating episodes when caloric intake is restricted.

Funding

Annenberg Commission on Adolescent Mental Health; National Institute of Diabetes and Digestive and Kidney Diseases.

Other publications of related interest

Bryant-Waugh RJ, Cooper PJ, Taylor CL, Lask BD. The use of the eating disorder examination with children: a pilot study. *Int J Eat Disorder* 1996;19:391-7.

Record status

This record is a structured abstract written by CRD reviewers. The original has met a set of quality criteria. Since September 1996 abstracts have been sent to authors for comment. Additional factual information is incorporated into the record. Noted as [A:.....].