

CADTH Reference List

# Behavioural Interventions for Weight Loss in Children Living With Overweight or Obesity

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## Key Message

- Five overviews of systematic reviews and/or meta-analyses and 71 systematic reviews (47 with meta-analyses and 4 with network meta-analyses) were identified regarding the clinical effectiveness of behaviour-based interventions or alternative therapies for weight loss in children living with overweight or obesity.

## Research Question

What is the clinical effectiveness of behaviour-based interventions or alternative therapies for weight loss in children living with overweight or obesity?

## Methods

### Literature Search Methods

A limited literature search was conducted by an information specialist on key resources including MEDLINE, the Cochrane Database of Systematic Reviews, the international HTA database, the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search strategy comprised both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. The main search concepts were pediatrics, obesity, and behaviour-based interventions or alternative therapies. Search filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, or network meta-analyses. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2013 and March 2, 2021. Internet links were provided, where available.

### Selection Criteria

One reviewer screened literature search results (titles and abstracts) and selected publications according to the inclusion criteria presented in Table 1. Full texts of study publications were not reviewed.

## Results

Five overviews of systematic reviews and/or meta-analyses<sup>1-5</sup> and 71 systematic reviews<sup>6-76</sup> (47 with meta-analyses<sup>8,10,12,14,17-19,21,22,25,26,28,30-33,35-39,41,42,45,47,49,50,53-61,63-72,75</sup> and 4 with network meta-analyses<sup>16,27,29,52</sup>) were identified regarding the clinical effectiveness of behaviour-based interventions or alternative therapies for weight loss in children living with overweight or obesity. No relevant health technology assessments were identified.

Additional references of potential interest that did not meet the inclusion criteria are provided in Appendix 1.

**Table 1: Selection Criteria**

Criteria	Description
<b>Population</b>	<p>Children and youth 2 to 18 years old living with overweight or obesity (i.e., BMI &gt; 85th percentile for age and sex)</p> <p>Exclude: Those with eating disorders, overweight or obesity secondary to genetic or medical condition (e.g., Cushing's), weight gain secondary to medications (e.g., anti-psychotics), pregnant, or breastfeeding.</p>
<b>Intervention</b>	<p>Behaviour-based (e.g., diet, exercise, lifestyle) or complementary or alternative therapies (e.g., acupuncture, naturopathic therapies) interventions for weight loss management, alone or in combination with another behavioural intervention for weight loss management.</p> <p>Interventions should be initiated through (or feasible within, or referral from) a setting that is generalizable to Canadian primary care, and could be delivered by a health care professional (e.g., physician, psychologist, nurse, dietician).</p> <p>Exclude: Treatments provided in an inpatient hospital setting (e.g., within a surgical or metabolic unit), behavioural interventions used in combination with a pharmacological or surgical intervention for weight loss management</p>
<b>Comparator</b>	<p>No or minimal treatment (e.g., wait-list control, a single information session on healthy living, a newsletter); usual care; alternative behaviour-based interventions for weight loss or weight management, alone or in combination with another behaviour-based intervention for weight loss.</p> <p>Exclude: Alternative surgical or pharmacological interventions for weight loss or weight management</p>
<b>Outcomes</b>	<p>Clinical benefits (e.g., weight change, adiposity, hypertension, dyslipidemia, sleep apnea, fasting blood sugar, mental health, quality of life, physical fitness) and harms (e.g., death, need for medical or psychiatric treatment, growth retardation, gastrointestinal events)</p>
<b>Study designs</b>	<p>Health technology assessments, systematic reviews</p>

BMI = body mass index.

## References

### Health Technology Assessments

No literature identified.

### Systematic Reviews and Meta-analyses

#### *Overviews of Systematic Reviews and/or Meta-analyses*

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### Systematic Reviews of Randomized Controlled Trials Only

#### *Multiple Interventions or Multidisciplinary Interventions*

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#### *Multiple Interventions or Multidisciplinary Interventions – Broader Age-Specific Criteria*

13. Okoniewski W, Lu KD, Forno E. Weight loss for Children and Adults with Obesity and Asthma. A Systematic Review of Randomized Controlled Trials. *Ann Am Thorac Soc.* 2019 05;16(5):613-625. [Medline](#)
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### Education

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## *Technology-Based Interventions*

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## Appendix 1: References of Potential Interest

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