(atherogenic diet-fed *Wt*) by reducing adipose inflammation and improving adipose morphometry, and this corrects fatty livers. Diabetic mice with metabolic obesity (atherogenic diet-fed *foz/foz*) were reluctant to use the wheel, perhaps secondary to excessive weight gain, and resultant mild exercise failed to confer benefits on the metabolic phenotype.

Reference

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Parent-focused childhood overweight and obesity eHealth interventions: A systematic review and meta-analysis

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Introduction: eHealth interventions have shown promise in assisting with lifestyle behaviour change and offer the advantage of broad-reach access. Many previous eHealth studies in children and adolescents have demonstrated positive results in relation to weight, physical activity or diet. However, there have been no previous reviews which have specifically investigated the effectiveness of parent-focused eHealth obesity interventions.

Methods: Seven databases were searched from 1995—2015. Randomised controlled trials which reported BMI/BMI z-score were included. Secondary outcomes included diet, physical activity and screen time.

Results: Eight articles on seven eHealth interventions, using the mediums of internet, interactive voice response and telemedicine were included. Participant age ranged from 5—15 years and study size ranged from 35—1013 dyads. One study reported a significant improvement in weight/adiposity (waist-to-hip ratio). Three studies demonstrated significant improvements in at least one dietary measurement and three studies showed significant improvements in at least one physical activity measurement. A meta-analysis demonstrated no significant difference in the effects of parent-focussed eHealth obesity interventions compared to a control on BMI/BMI z-score (SMD −0.15, 95% CI −0.45 to 0.16, $Z = 0.94$, $P = 0.35$).

Conclusion: While over half of the studies demonstrated significant improvements in diet or physical activity, only one found a significant change in weight/adiposity. As many studies were small, they may have been inadequately powered. There were no studies on children under the age of five. It is recommended that larger studies be conducted, particularly those which target younger age groups.

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Treatment seeking people with obesity still in need of nutrition education

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Objective: A better understanding of the general nutrition knowledge among obese patients (OP) will inform the design of effective weight management education programs. This study assessed general nutrition knowledge in OP seeking treatment and compared this to a community sample (CM) with participants from the healthy weight (HW), overweight (OW) and obese (OB) range.

Methods: Participants were a convenience sample of OP attending a tertiary weight loss clinic and the general community (CM) (aged > 34 years). BMI was measured in OP and self-reported in CM. Nutrition knowledge was measured using a validated, General Nutrition Knowledge Questionnaire (GNKQ) assessing four domains: dietary recommendations, sources of nutrients, choosing everyday foods and the diet—disease relationships. The influence of demographic characteristics (age, gender, education) on general nutrition knowledge was also assessed.

Results: A total of 472 participants (OP: 211; CM: 261) were recruited. OP were older (OP: 53.0 ± 9.8; CM 49.1 ± 10.0 y; $p < 0.0005$) and had a higher BMI (OP: 45.0 ± 9.2; CM: 26.8 ± 6.1 kg m^{-2}; $p < 0.0005$)