

## **Effect of family-based REDUCE intervention program on children eating behavior and dietary intake: randomized controlled field trial**

### **ABSTRACT**

The objective of this study was to evaluate the effect of a family-based intervention program (REDUCE) on children's eating behaviors and dietary intake. A two-arm randomized controlled field trial was conducted among parents and children of 7 to 10 years old who were either overweight or obese. The intervention was conducted via face-to-face sessions and social media. The child eating behaviors were assessed using the child eating behaviors questionnaire (CEBQ), while their dietary consumption of vegetables and unhealthy snacks was assessed using a parental report of three days unweighted food. The generalized linear mixed modelling adjusted for covariates was used to estimate the intervention effects with alpha of 0.05. A total of 122 parents (91% response rate) completed this study. At the six-month post-training, there were statistically significant mean differences in the enjoyment of food ( $F(6481) = 4.653, p < 0.001$ ), fruit and vegetable intake ( $F(6480) = 4.165, p < 0.001$ ) and unhealthy snack intake ( $F(6480) = 5.062, p < 0.001$ ) between the intervention and wait-list groups; however, it was not clinically meaningful. This study added to the body of knowledge of family-based intervention that utilized social media and assessed the effect in children's eating behavior using the CEBQ and children's dietary intake.

**Keyword:** Child; Parents; Vegetables; Snacks; Fruit; Overweight; Obesity; Social media; Enjoyment of food; Food responsiveness; Satiety responsiveness; Food record; Feeding behavior; Diet; Sugar-sweetened beverages