

# **Effects of Exposure to Mindful Eating at a 6-day Summer Camp for Children with Obesity Participating in a Hospital-based Pediatric Weight Management Program: A Pilot Study**

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**Introduction:** The HealthWorks! Camps Out (HCO) program, a 6-day healthy lifestyle immersion experience for children with obesity ages 9-13. Previous HCO studies find significant short-term improvement in weight status, yet longer-term data do not show maintenance of improvement. Mindfulness-based strategies have been used in both adults and children, but there is a lack of research on mindful eating (ME) specifically for the treatment of childhood obesity.

**Aims:** The objective of this project was to assess the effectiveness of exposing children with obesity to ME activities as an adjunct behavioral intervention for sustaining weight status improvement among HCO participants.

**Methods and Data Collection:** Study subjects were recruited from campers who attended HCO in June 2015. Parent/guardian consent and subject assent were obtained. Subjects were exposed to ME exercises on 4 consecutive days. At the end of camp, parents received materials to support healthy lifestyle choices at home, including ME-specific tools. Subjects completed surveys at the end of camp (EOC) and at a 1-2 month post-camp clinic visit (PCF). Anthropometric data were obtained on the first day and last days of camp and at 1-2 month post-camp clinic visit. This study protocol was approved by the hospital's IRB.

**Results:** 55 of 57 subjects completed the 6-day camp, 36 (65.5% of completers) returned for PCF. Mean change in weight status ( $\Delta$ WS) from baseline to EOC was -2.50%<sub>95%</sub>ile (+/-1.2 p<0.001) and 1.25%<sub>95%</sub>ile (+/-2.9 p=0.014) EOC to PCF. EOC survey results showed 42% wanted to use ME at home. While PCF survey showed 76% listed  $\geq 1$  benefit of ME and 58% found using ME not difficult/easy, the frequency  $\geq 1$ /week of home-use of two take-home tools were 16% and 19%. There was no significant difference in  $\Delta$ WS with regards to frequency of reported home use of ME tools.

**Conclusions:** Despite expressed interest in using ME strategies at home, most campers did not report using ME tools designed for use at home. Family-based exposure to ME is a potential approach to explore for improving home adoption of these strategies.

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