

Cognitive Behavior Modification and Exercise + Group Counseling for Patients After Bariatric Surgery

BUCKWORTH J¹, CARDUCCI C¹, KINDRICK S², MIKAMI D⁴, SCHUSTER D³,
STOUGH K², NEEDLEMAN B⁴.

¹Health & Exercise Science; ²Center for Wellness and Prevention; ³Division of Endocrinology, Diabetes, and Metabolism; ⁴Bariatric Surgery Program, The Ohio State University; Columbus, Ohio

ABSTRACT

Background: The growing obesity epidemic is paralleled by an increasing number of bariatric surgeries. Patients lose significant weight within the first 12-18 months post-surgery with corresponding resolution of many co-morbidities. However, weight loss stabilizes after 18-24 months and 50% or more of patients eventually regain weight (Bond, Phelan, Leahey, Hill, & Wing, 2009; Magro, et al., 2008). Weight regain after loss is associated with return of co-morbidities and deteriorations in health-related quality of life and mood (Karlsson, Taft, Ryden, Sjostrom, & Sullivan, 2007). **Purpose:** The purpose of this pilot study was to analyze the effects of a post-surgical behavioral plus counseling intervention on bariatric surgery patients who are struggling to maintain their weight loss ≥ 2 years after surgery. **Methods:** Project REACH (Relearn how to Eat, increase Activity and Create better Habits) was a 12-week intervention designed to change psychosocial mediators of health behaviors and fitness variables. Patients met for 1 hr each week for cognitive behavior modification and exercise instruction and practice followed by 1 hr of a closed counseling session. Psychosocial variables and fitness were measured before and after the intervention. Descriptive statistics, paired-samples t-tests, and Cohen's *d* were applied to the data. **Results:** Eight women aged 39-68 yr ($M = 54.37$, $SD = 9.62$), BMI range 24.4-50.5 kg/m² ($M = 38.16$, $SD = 7.61$) self-selected into the program. At the pre-test, BMI was correlated with diet/lifestyle self-efficacy ($r = -.913$, $p = .002$), social support for exercise-friends ($r = -.800$, $p = .017$), and exercise planning ($r = -.730$, $p = .040$). Distance walked in 6 min (6MWT) increased for the 4 women who completed the post-test ($p = .040$, $d = 1.68$). Changes in some fitness (e.g., BMI: $d = -0.77$) and psychosocial variables (e.g., exercise planning: $d = 1.02$; dietary cognitive restraint: $d = 0.73$) had medium and large effects. **Conclusions:** Targeting exercise, nutrition, and psychological issues together in an intervention can have positive effects on fitness and psychosocial factors that may help patients more than 2 yr post-surgery manage their weight.

KEY WORDS: Bariatric Medicine, Behavior Modification, Counseling, Exercise, Weight Reduction, Obesity