

**The Efficacy of a Maintenance-Oriented Weight Management Program
in an Obese Population**

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ABSTRACT

While weight loss programs over the past 30 years have proven to be effective in producing initial weight-loss, long-term weight maintenance has remained an elusive goal. Given the serious negative health consequences associated with obesity, new approaches to weight management are warranted. The purpose of this study was to evaluate the efficacy of a maintenance-oriented weight management program in producing changes in weight, body composition, fitness, blood lipids, physical activity, and strength following completion of the treatment program and at 3-month follow-up. Fifty overweight and obese men ($n = 18$) and women ($n = 32$), ages 27-55 ($M = 40.52$) who had low cardiorespiratory fitness ($M = 20.87$ ml/kg/min) and high total cholesterol ($M = 223.36$) were randomly assigned to one of three treatment conditions: 1] Behavioral Choice Treatment (BCT) with a theory-based maintenance-oriented program, moderate calorie goals, and the New Healthy Pyramid for nutrition recommendations; 2] a traditional exercise and nutrition education program (USDA) using the current Dietary Guidelines for Americans with the Food Guide Pyramid; and 3] a wait-list control group that was transitioned into BCT without the maintenance-oriented program (WLC/BCT w/o maintenance). All groups (during treatment) received a center-based strength and aerobic program utilizing short-duration, but prescriptive protocols aimed at increasing fitness and strength. Assessments were completed at baseline, 16 weeks, 28 weeks, and 40 weeks (WLC/BCT w/o maintenance only). Participants in BCT and USDA experienced significant health changes compared to WLC who experienced minimal weight gain and decreased fitness across the 4-month waiting period. Results comparing BCT, BCT w/o maintenance, and USDA revealed that participants in all treatment conditions significantly improved aerobic fitness, strength, and physical activity during treatment (p 's $< .05$). Participants in the BCT groups experienced significant decreases in weight, total % body fat, waist

and hip circumferences, BMI, and LDL-C (p 's < .05), while participants in USDA did not. At 3-month follow-up, while participants in both BCT groups continued to make improvements on multiple health outcomes, only participants in BCT with maintenance group were able to maintain their fitness gains (p < .001). In addition, BCT with maintenance group showed a trend toward continued weight loss, maintenance of physical activity, and increased strength.

Taken together, the data indicate that any BCT offers greater health outcomes compared to a more traditional educationally based program both at post-treatment and follow-up. Importantly, BCT with maintenance offered additional benefits including continued weight loss, continued decreased intra-abdominal fat, maintenance of fitness, physical activity, and strength compared to BCT w/o maintenance. In conclusion, given the limited scope of small center-based trials, future studies need to examine the effectiveness of this program in a more community-based setting where there is potential for greater public health impact.

DEDICATION

This is dedicated to both my parents, Bernie and Dianne Lutes, who raised me with unyielding love and support to pursue my dreams, to my Husband, Jason Fox, who has continued to nurture and love me as my dream became reality: I am blessed to have you all in my life.

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