Submission Id: 3519

Title

Comparative effectiveness RCT of two weight loss strategies in primary care patients: MyPlate.gov vs Calorie Counting

Priority 1 (Research Category)

Obesity, exercise and nutrition

Presenters

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Abstract

Context: Since 2011, the U.S. government has supported two approaches to achieve healthier body fat composition: the Diabetes Prevention Program calorie counting (CC) approach, and adherence to federal nutrition guidelines at www.choosemyplate.gov (MyPlate).

Objective: Compare the effect of the CC versus MyPlate approach on satiety/satiation and on achieving healthier body fat composition in the primary care setting.

Study Design: Randomized, controlled trial comparing the MyPlate and CC approaches from 2015 to 2017.

Setting: A federally qualified health center in Long Beach, California.

Population: Adult, low-income, mostly Latina patients (N=261) with a BMI between 27 and 40.4 were randomized to condition and followed for twelve months (76.6% retention).

Interventions: Eleven health education sessions featuring MyPlate versus CC messages. Community health workers conducted two home visits, two group education sessions and 7 telephone coaching calls over six months.

Outcome Measures: Satiation and satiety were primary patient-centered outcomes. Waist circumference and body weight were primary anthropometric measures. These were assessed at baseline, 6- and 12-months follow-up.

Results: Satiation and satiety scores increased for both groups; neither group lost significant body weight, and only the MyPlate condition reduced waist circumference by 2 cm at 12 months. Both conditions reported consuming proportionately more fruits and vegetables and fewer sugary beverages at 12 months. MyPlate but not CC participants experienced lower systolic blood pressure at 6 months follow-up; neither group had lower blood pressure at 12 months. Both MyPlate and CC participants

reported higher quality of life and emotional well-being at 12 months and high satisfaction with their assigned weight loss program. At 12 months follow-up, the most acculturated participants experienced the greatest reduction in waist circumference.

Conclusions: A MyPlate-based intervention may be a practical alternative to the more traditional CC approach to promoting satiety and facilitating reduction in central adiposity among low-income mostly Latina overweight primary care patients. Our results align with recommendations favoring a diet rich in diverse, fiber-rich foods. More research is warranted to investigate satiety-enhancing approaches to desirable weight control in diverse populations and the use of community health workers as change agents.