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ABSTRACT

Objective: To assess the effectiveness of a tailored theory-based, Web-delivered intervention (Young Adults Eating and Active for Health) developed using community-based participatory research process.

Design: A 15-month (10-week intensive intervention with a 12-month follow-up) randomized, controlled trial delivered via Internet and e-mail.

Setting: Thirteen college campuses.

Participants: A total of 1,639 college students.

Intervention: Twenty-one mini-educational lessons and e-mail messages (called nudges) developed with the non-diet approach and focusing on eating behavior, physical activity, stress management, and healthy weight management. Nudges were short, frequent, entertaining, and stage-tailored to each behavior, and reinforced lesson content.

Main Outcome Measure: All participants were assessed at baseline, postintervention (3 months from baseline), and follow-up (15 months from baseline) for primary outcomes of weight, body mass index (BMI), fruit and vegetable intake (FVI), physical activity (PA), and perceived stress; and secondary outcomes of waist circumference, percent dietary fat, energy from sugar-sweetened beverages, servings of whole grains, self-instruction and regulation for mealtime behavior, hours of sleep, and stage of readiness for change for consuming 5 cups of FVI, completing 150 minutes of PA/wk, and managing stress on most days of the week. Demographics were collected at baseline.

Analysis: Chi-square analysis and mixed-models repeated measures analysis were performed to determine differences between experimental and control outcomes.

Results: There were no differences between experimental and control participants in BMI, weight, and waist circumference. There were small improvements in FVI ($P = .001$), vigorous PA in females ($P = .05$), fat intake ($P = .002$), self-instruction ($P = .001$), and regulation ($P = .004$) for mealtime behavior, and hours of sleep ($P = .05$) at postintervention, but improvements were not maintained at follow-up. At

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