

## Background

Obesity is prevalent among minority adolescents. While registered dietitians (RDs) are trained to prevent and treat obesity, few dietetic internships provide exposure to childhood obesity interventions. Facilitating adolescent obesity interventions could provide dietetic interns experience tailoring nutrition messages to a youth population. In return, receiving advice from a knowledgeable role model, such as an intern, could help promote sustained reductions in standardized BMI (zBMI) among adolescents.

## Purpose

To determine the feasibility of using dietetic interns to facilitate a 6-month obesity intervention for middle school students and to examine the sustainability of the program at 24-months according to students' zBMI.

## Methods

### Participants

Hispanic middle school students aged 11-14 years old with overweight or obesity (n=137).

### Procedures

Students were randomized to either receive an intensive intervention (see Table 1) or to a self-help condition (received self-help weight management book, *Trim Kids*). Both conditions were 12 weeks long.

### Outcomes

The primary outcome was zBMI, which was calculated from students' height, weight, date of birth, and gender at baseline, 6, 12, and 24 months.

### Analyses

Repeated measures ANOVA was used to assess differences in zBMI across conditions and time.

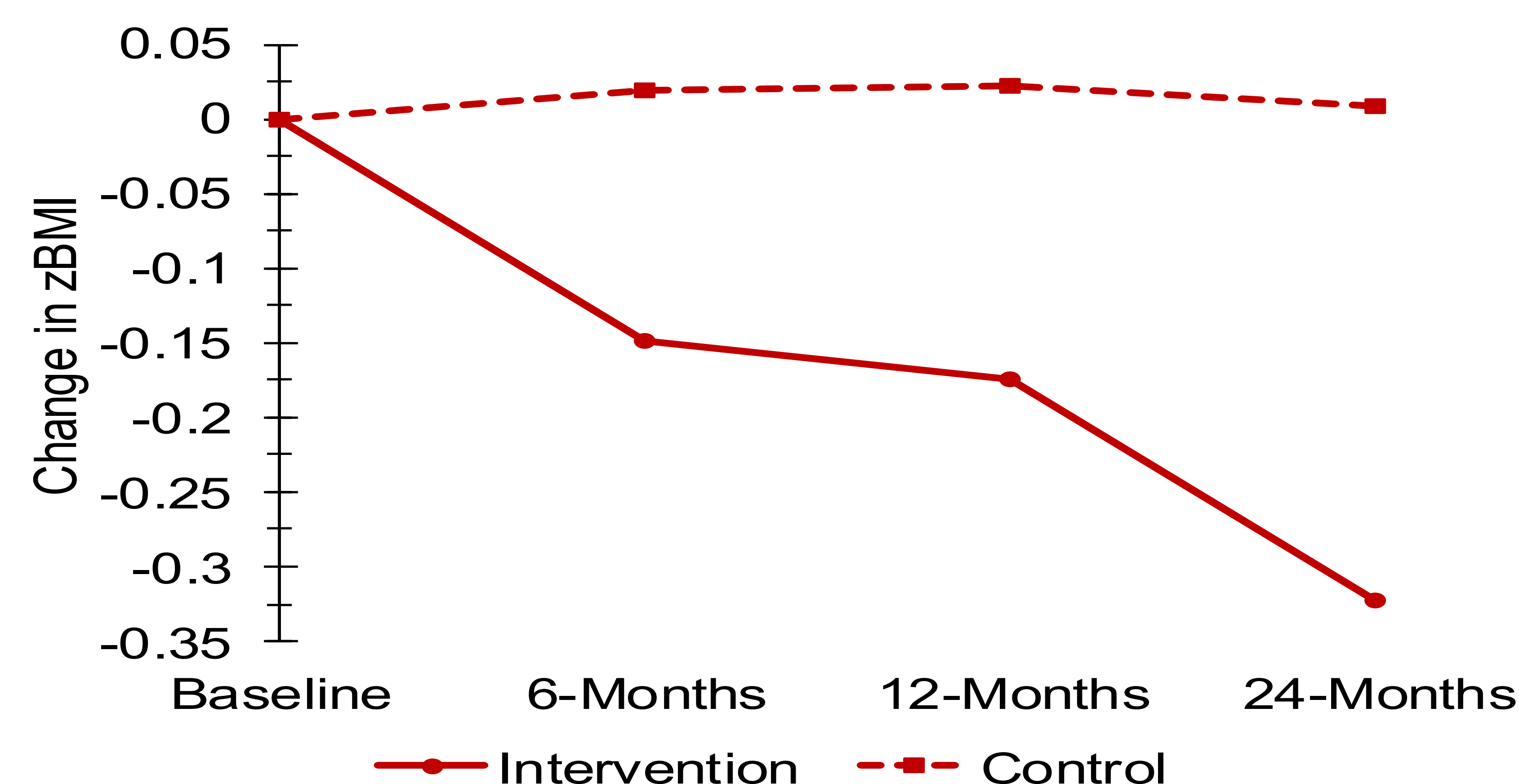
## Methods continued

**Table 1. Description of Intervention Condition**

	Intervention Components
<b>Nutrition Instruction</b> 1 day/week	<b>Dietetic Interns</b> led nutritional instruction, which included: <ul style="list-style-type: none"> <li>. How to make healthier food choices</li> <li>. How to read nutrition labels</li> <li>. How to control portion sizes</li> <li>. How to classify foods into 3 categories (little bites, portion rights, and big bites) based on their health benefits</li> </ul>
<b>Physical Activity</b> 4 days/week	<b>Weeks 1-6</b> <b>Goal</b> —to reach basic level of fitness <ul style="list-style-type: none"> <li>. Modified circuit-training</li> <li>. Maintain heart rate in target zone</li> <li>. Build endurance, strength, and flexibility</li> </ul> <b>Weeks 7-12</b> <b>Goal</b> —to increase skills needed to participate in activities available to students in the community that they might engage in following the intervention including: <ul style="list-style-type: none"> <li>. Sports team activities (e.g. soccer, basketball, softball)</li> <li>. Leisure activities (e.g. jump rope, dance, kickboxing)</li> </ul>
<b>Behavioral Modification</b> 5 days/week	<b>Token economy system</b> <ul style="list-style-type: none"> <li>. Points awarded for meeting goals, trying new fruits &amp; vegetables, reaching physical activity level in class</li> <li>. Points redeemed weekly for prizes</li> </ul> <b>Self monitoring</b> of weight, diet, physical activity, & sedentary behavior
<b>Parental Involvement</b>	Parents invited to attend <b>monthly</b> meetings

## Results

A significant difference between conditions over time ( $F=15.778$ ,  $p<0.001$ ) was found. At 24-months, students randomized to the intervention condition significantly reduced their zBMI by 60% from baseline; whereas students in the self-help condition did not reduce their zBMI.



**Figure 1. Change in zBMI over time in the intervention and self-help conditions.**

## Conclusions

The results of this study demonstrate that training dietetic interns to facilitate a middle school obesity intervention is feasible. This efficacious method promotes and sustains desirable weight outcomes among Hispanic adolescents.

## Acknowledgement

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