



HEALTH U: A Weight Loss Intervention for Youth with Intellectual Disabilities

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INTRODUCTION

- The prevalence of obesity in children and youth with intellectual disabilities (ID) is higher than that of the typically developing (TD) population. Few weight loss studies have been conducted in youth with ID and no published study has addressed maintenance of weight loss.
- The goal of Health U was to adapt a family-based behavioral intervention (FBBI) for weight loss that has been developed for typically developing children/youth to accommodate the needs of youth with ID.

4 key intervention components:

- Group-based Nutrition & Physical Activity sessions.
- Monthly individual counseling.
- Specially developed dietary prescription called the "Healthy Eating Plan"
- Parent training in behavioral techniques to support youth to make positive changes in the areas of diet and physical activity

The primary aim of this RCT:

To determine: the effectiveness of the family-based behavioral intervention (FBBI) for weight loss and whether participants who received an additional 6-month maintenance intervention lost additional weight compared to those who did not receive any further intervention.

Primary Outcome Measures:

- Weight (& Height)
- Body Mass Index (BMI)
- Measured at Baseline, 6, 12, 18 months



METHODS

Study Design:

All participants received the 6-month FBBI intervention:

- conducted 24 weekly sessions
- 3 sessions/month were group-based
- 1 session/month consisted of individual counseling
- Group sessions were 90 minutes and individual sessions were 30 minutes



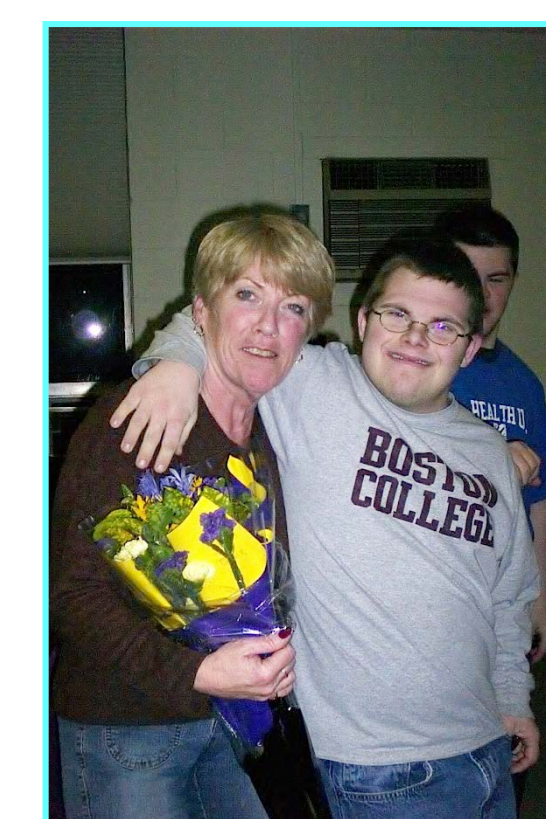
Learning about serving sizes



Playing Go Snack!



Physical Activity



Parent / Teen Partnership

Group sessions consisted of:

- hands-on nutrition education for youth and their parents together
- parent-only training on tracking of eating and physical activity (PA) behaviors, stimulus control, goal-setting, and reinforcement at home of health behaviors and goal attainment
- youth-only games, taste-testing, and group PA (while parents were with the lifestyle coach).

Following the 6-month FBBI intervention, participants were randomized to receive a 6-month maintenance intervention or to receive no further treatment.

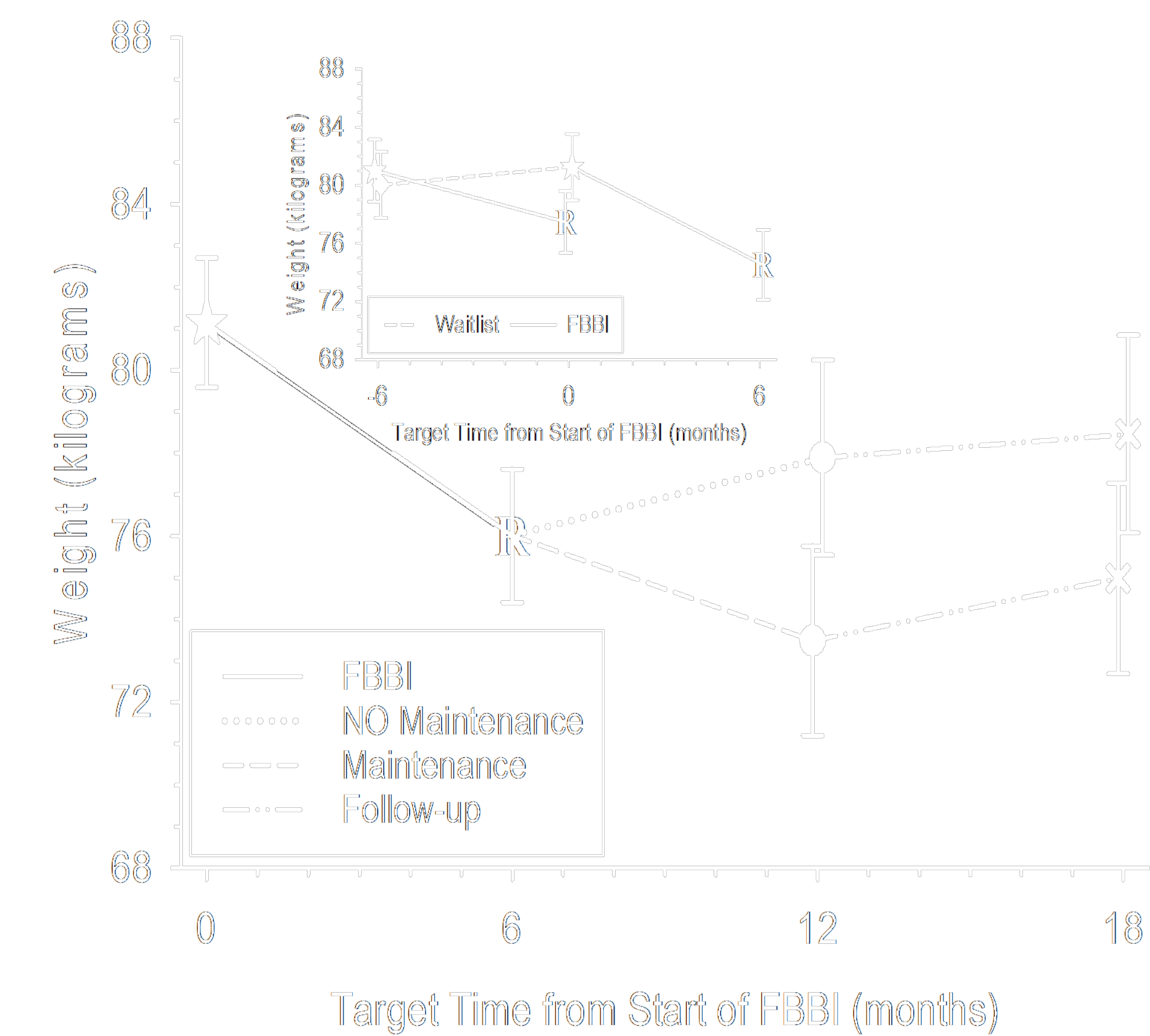
- Maintenance sessions were conducted bi-weekly over a 6-month period
- 12 sessions alternated bi-weekly between an individual 30-minute nutrition and behavioral counseling session and a 90-min group educational session that targeted continued weight loss or weight maintenance.

RESULTS

Participant Characteristics

- 27 youth participated in the study
- Mean age: 18 years (range: 14-22 years)
- Sex: 33% male
- Race: 100% white
- Ethnicity: 3.7% Hispanic/Latino
- Parent marital status: Over 75% married or living with a partner
- Mean BMI: 33.5

Weight status at Baseline, 6, 12, and 18 months



- Participants lost, on average (SE), 5.1 (0.8) kg between baseline and the end of the end of the 6-month FBBI intervention ($p < 0.001$)
- Participants in the Maintenance group lost, on average (SE), 7.6 (1.2) kg from Baseline, whereas those in the No-Maintenance group gained weight and weighed, on average (SE), 3.2 (1.2) kg less than at Baseline ($p = 0.008$) (Comparing Maintenance to No-Maintenance weight loss from Baseline)
- At the 18 month follow-up time point (6 months after the end of the Maintenance phase), those who received the Maintenance intervention weighed, on average (SE), 6.1 (1.2) kg less than they did at Baseline, compared to the No-Maintenance group who weighed, on average (SE), 2.6 (1.2) kg less than they did at Baseline ($p = 0.039$) (Comparing Maintenance to No-Maintenance weight loss from Baseline).

DISCUSSION & CONCLUSIONS

- The findings support the value of family participation in an intensive weight loss intervention for youth with ID.
- The addition of a less intensive maintenance intervention is a promising approach for sustaining weight loss long-term.
- Research is needed to:
 - replicate these outcomes with larger numbers of participants
 - increase participant racial and ethnic diversity to ensure generalizability
 - adapt and test similar interventions with younger children with ID
 - investigate implementation in clinic and community-based settings