Let’s Go!
Childhood Obesity Project ECHO®

Dr. Tory Rogers
Dr. Carrie Gordon
Meg Nadeau

May 5, 2022
Housekeeping

- This session will be recorded for educational and quality improvement purposes.
- Please do not provide any protected health information (PHI) during any ECHO session.
- Zoom trouble? Chat to Meg Nadeau

Please turn on your video!
Please enter your name, organization, and email address (needed for CME) in the chat.
If you are watching as a group, please put everybody’s information in the chat.

Welcome and Introductions (5 min)
Lecture & Q&A (25 min)
Case/Discussion (25 min)
Close (5 min)
Focus of this Project ECHO®

- Increase the understanding and minimization of bias and stigma that is associated with obesity
- Promote a supportive, health-forward approach in your workforce and office environment around treatment of obesity
- Model health-focused language for parents
- Put Motivational Interviewing into practice
- Develop individualized treatment plans based on obesity physiology to help families reach their healthy goals
- Initiate treatment early and provide timely follow up
Bright Bodies: A Family-based Healthy Lifestyle Program

Child Obesity Project ECHO
May 5, 2022

Mary Savoye, MS, RD, CDE
Associate Director, Pediatric Obesity
**What We Will Cover:**

- Overview of the program
- Eligibility criteria and philosophy
- Timeline for participants
- Snapshot of components
- Delivery Methods
- Research and Program Outcomes
Program Philosophy & Eligibility Criteria

• Approach: non-diet, healthy food choices
• Family-oriented (parent/caregiver must participate with child)
• Children ages 7 to 16
• BMI >85th percentile for age and gender
  (however, most are Class II and III obesity)
Program Timeline

For each 12-week Session:

- Physical Activity (2X wk)
  - Children

- Nutrition Education (1X wk)
  - Children & Parents

- Behavior Mod. (1X wk)
  - Children

- Parent Classes (1X wk)
  - Parents

*Members are encouraged to complete consecutive 12-wk sessions*
Nutrition Education Component

• Overall Goal: To foster healthy eating habits for the child with obesity and their family

• 40-minute classes, 1 x/wk facilitated by RD (now 15-20 min)

• Grouped according to age (7-10, 11+)

• Different levels (Beginner, Intermediate, Advanced)

• Parent attends all nutrition topics with child

• Non-diet, better food choices approach
Non-diet Approach

• Healthy food choices
• No food is “off limits”
• Moderate portions, nutrient-density, & healthy cooking emphasized.
• There is always a good choice no matter what situation the child/adolescent is in. Life skill for long-term approach.
• “It’s eating healthier my way.” —9 yo Chloe
<table>
<thead>
<tr>
<th>Non-Diet Approach</th>
<th>Diet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifestyle and behavior change</td>
<td>Eat certain foods for a given amount of time to lose weight</td>
</tr>
<tr>
<td>Long term</td>
<td>Short term</td>
</tr>
<tr>
<td>Gradual, realistic changes and goals</td>
<td>Unrealistic changes and goals</td>
</tr>
<tr>
<td>Takes time and effort</td>
<td>Pre-printed and follow directions</td>
</tr>
<tr>
<td>Education</td>
<td>Information</td>
</tr>
</tbody>
</table>
Dieting vs. Non-dieting Approach

- Non-dieting approach: better food choices
- Dieting approach: structured meal plan
- Groups matched by age, gender, & motivational level; BFC n=17 SMP n=8

What’s in Your Drink

Things to consider when choosing a drink:

1. Is it going to quench your thirst?
2. Is it going to build strong teeth?
3. Is it going to fuel your body? Choose a drink with vitamins and minerals like milk.

Tips:
- Water is the best drink for thirst
- Add fruit to water or flavored seltzer for added taste
- Drink fluid every 15 minutes, even when you don’t feel thirsty
- Be careful when exercising in warm/humid weather because of dehydration

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Teaspoons of Sugar

Coca Cola (20 oz) ............................................. 16.25
Orange Soda (12 oz) ........................................ 10.75
Grande Juice (11.5 oz) ..................................... 12.75
Gatorade (20 oz) ............................................. 8.5
Starbucks Grande Iced Mocha Frappuccino (16 oz) 15.5
Sunny Delight Drink (16 oz) .............................. 6.5
Monster Energy Drink (16 oz) ............................ 13.5
Snapple Lemonade Iced Tea (16 oz) ................... 12.5
Seltzer (8 oz) .................................................. 0
Water (8 oz) .................................................... 0

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How to find the amount of sugar in a drink:

Grams of Sugar ÷ 4 = Teaspoons of Sugar
Physical Activity Component

• Goal: To instill sense that exercise can be fun and is critical to weight management.

• Children exercise with peers of similar age 2 x/wk for 45 minutes while supervised by an exercise physiologist.

• Encouraged to exercise at least 3 additional days per week and decrease sedentary behaviors.
The younger group members are all smiles as they play a game of “Getting Dressed for the Cold” with exercise physiologist Jose Hernandez.

Our new world of Zoom
Behavior Modification Component

• Overall goal: To help the children replace negative behaviors that lead to overeating with positive, healthful behaviors, while improving overall self-image.

• 40-minute classes facilitated by RD or MSW (now 15-20min)

• Some techniques: self awareness, stimulus control, client-centered approach
Smart Moves
Healthy Lifestyle Curriculum

- 120-page workbook of nutrition & behavior modification topics for children
- Parent’s guide included in workbook
- Instructor’s manual to accompany workbook

Recipes from the Heart
Meals in the Fast Lane
A Look at Food Labels

Risky Business: Coping with High-Risk Situations
Teasers, Bullies & Other Annoying People
Oops I Slipped!—Understanding a Relapse
Best Outcome in Health Care Setting

Effects of a Weight Management Program on Body Composition and Metabolic Parameters in Overweight Children
A Randomized Controlled Trial

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James Dziura, PhD
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Paulina Rose, RD, CD-N, CDE
Cindy Guandalini, APRN
Rachel Goldberg-Gell, APRN
Tania S. Burgert, MD
Anna M. Cabi, MD
Ram Weiss, MD, PhD
Sonia Caprio, MD

Context Pediatric obesity has escalated to epidemic proportions, leading to an array of comorbidities, including type 2 diabetes in youth. Since most overweight children become overweight adults, this chronic condition results in serious metabolic complications by early adulthood. To curtail this major health issue, effective pediatric interventions are essential.

Objective To compare effects of a weight management program, Bright Bodies, on adiposity and metabolic complications of overweight children with a control group.

Design One-year randomized controlled trial conducted May 2002-September 2005.

Setting Recruitment and follow-up conducted at Yale Pediatric Obesity Clinic in New Haven, Conn, and intervention at nearby school.

Participants Random sample of 209 overweight children (body mass index [BMI] >95th percentile for age and sex), ages 8 to 16 years of mixed ethnic groups were recruited. A total of 135 participants (66%) completed 6 months of study, 119 (53%) completed 12 months.

Intervention Participants were randomly assigned to either a control or weight management group. The control group (n=69) received traditional clinical weight man-
Changes in Adiposity: Bright Bodies vs. Clinic

At 6 and 12 months BB n=105, CC n=69  *p<0.001,  Error bars represent 95% CI

Insulin Sensitivity Changes: Bright Bodies vs. Clinic


At 6 and 12 months BB n=105, CC n=69   ***p<0.001,  Error bars represent 95% CI
<table>
<thead>
<tr>
<th>Journal</th>
<th>Year</th>
<th>Study Duration/N</th>
<th>Study Outcome (experimental vs control)</th>
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</thead>
<tbody>
<tr>
<td>JAMA Savoye, et al.</td>
<td>2007</td>
<td>1 year N=205/174 completers</td>
<td>BMI -1.7 vs +1.6 Body fat -4 kg vs +6 kg HOMA-IR -1.5 vs +1.0 (p&lt;.001)</td>
</tr>
<tr>
<td>Pediatrics Savoye, et al.</td>
<td>2011</td>
<td>2 years N=174/76 completers</td>
<td>Significance of Tx effect sustained (p&lt;.001)</td>
</tr>
<tr>
<td>Diabetes Care Savoye, et al.</td>
<td>2014</td>
<td>6 months N=75/58 completers</td>
<td>2-hr blood sugar (OGTT) -27.2 mg vs. -10.0 mg/dl (p=0.005). Greater conversion from IGT to NGT in tx group (p=0.003) and there were cases of development of T2DM in control.</td>
</tr>
<tr>
<td>Pediatric Obesity J Taylor, et al.</td>
<td>2017</td>
<td>6 months N=75/58 completers</td>
<td>Self-concept and Family Functioning improved in experimental group. Most significant in those with low PHSC and FAD and poorest glucose regulation (p&lt;0.05).</td>
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Real World Outcomes

Program effectiveness sustained among “real-world” program participants since original RCT (2008-2018):
• ↓ BMI during participants’ first session (avg 10 weeks)
• Greatest improvement among those with severe obesity (typically difficult to treat)

Thank You!...Questions?

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BrightBodies.org
Some possible next steps for you....

1. Are there a few key take aways you can put into practice next week?
2. View the supplemental learning options - [LetsGo.org/ECHO](https://letsgo.org)
3. Think about any bias you have that might get in the way with your patients
   - Bias screening test - [https://implicit.harvard.edu/implicit/takeatest.html](https://implicit.harvard.edu/implicit/takeatest.html)
4. Do you have a Team to help you?
   - Internal team
   - Community partners
   - Referring physicians
5. Do you need to develop new Workflows for Well Visits and Follow Up Visits?
6. Think about taking an MI course
New Resources

- We have two new handouts that you can share with parents and caregivers of children who carry extra weight:
  - Speaking with Your Child About Health when they Have Extra Weight
  - Why Consider Bariatric Surgery for Adolescents?

- Download at LetsGo.org/PedClinicalTools
  - Parent & Caregiver Resources Menu
What’s Next

• Office Hours: May 19 from 12-1pm
  - Opportunity to talk with Carrie and Tory about cases, workflows, labs, etc

• Monthly ECHO session: June 2 | 12-1 pm
  - The Role of Medications in Treating Obesity

• August session- Participant choice
  - Vote for the topic you want to learn more about
    https://www.surveymonkey.com/r/ECHOWildCard

Scan with Smartphone camera
Evaluation and CMEs

If you haven’t already done so, please enter your name and email address in the Chat

- After each ECHO session, you will receive an email with a link to a brief evaluation survey and Post-Test.
  - Please complete within 1 week.

- Upon completion, a link to the CME credit will be sent to you.
Thank you

• Feel free to reach out to us at:
  - ObesityECHO@mainehealth.org
  or
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  - Carrie - carrie.gordon@mainehealth.org