

# Text Message Evaluations: A Strategy for Obtaining Real-Time Data from Hard-to-Reach Audiences



Nicole Finkbeiner, PhD

Food Supplement Nutrition Education

University of Maryland Extension

UNIVERSITY OF  
**MARYLAND**  
EXTENSION



# About Maryland FSNE

- Offers nutrition education programs to help Supplemental Nutrition Assistance Program (SNAP) households and those eligible for SNAP
  - Goals are to help participants make healthy food choices, develop food preparation skills, handle food safely, improve food shopping skills, and increase physical activity
- Education offered in person, but also via electronic methods in order to more comprehensively meet the needs of a diverse audience



# Text Messaging in Nutrition Education

- **Educate**
- **Remind**
- **Challenge**
- Provide feedback
- **Confirm message receipt**
- Track and monitor
- **Assess**
- **Receive feedback**



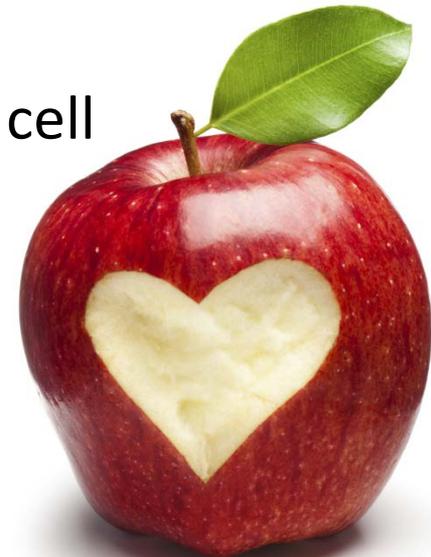
# Promising Findings

- Increase in health knowledge
  - Sexual health (Lim et al, 2011)
- Increase in positive health behaviors
  - Child immunization (Stockwell et al., 2012)
  - Smoking cessation rates (Free et al., 2011; Rodgers et al., 2005)
  - Physical activity (Lau et al., 2011)
  - Adherence to appointment schedules (Koshy et al., 2008)
- Some research using texts has produced negative or inconclusive findings (Cocosila et al., 2009)



# Who texts?

- U.S. adults
  - 91% own a cell phone (Pew, 2013)
    - 56% own a smart phone
    - 80% use text messages
- Lower income audiences (Smith, 2011)
  - 78% of those who make <\$30,000
- Racial and ethnic minorities (Pew, 2013)
  - 93% of Black and 88% of Latino persons use cell phones
- Parents (Ahlers-Schmidt et al., 2010)
  - 96% can receive text messages, 81% have unlimited texting plans



# Why text messages?

- Access to a diverse audience (DHHS, 2013)
  - Hard-to-reach populations
- Relatively low cost to researchers and participants (Fjeldsoe et al., 2009)
- Easily and quickly sent to a large audience
- Perceived as personal and informal (Gold et al., 2010)
- Easy to incorporate into everyday life
  - Remote (for researchers)
  - Instant & in context (for participants)
  - Reduce participant burden (Marshall et al., 2013)
- Real-time, interactive evaluation



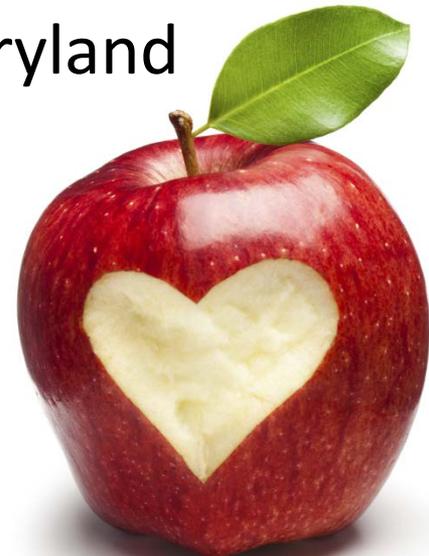
# Texting Programs Overview

- Text2BHealthy (T2BH)
  - Reaches parents of elementary students at FSNE schools
  - Targeted to school/community
- Feeding for Healthy Eating (FHE)
  - Developed from experiences with T2BH
  - Reinforcements to face-to-face program
  - Standard messages tied to curriculum
  - Evaluation



# Text2BHealthy

- FSNE-developed program: January 2012 - present
- Messages targeted by school/community
  - Local grocery store sales
  - School events
  - Community-wide events
  - Lunch menu offerings
- Offered in various counties throughout Maryland
- 2-3 text messages sent per week
  - **5 total evaluation messages sent in FY14**



# Program Participation

## Last year (2013-2014):

- 2,696 participants
  - 2,098 text
  - 598 email

## Current year (to date):

- 2,315 participants
  - 1,743 text
  - 572 email



# Evaluation Design and Data Sources

Intervention Schools

Control Schools

Participants

Non-participants

Non-participants

- Focus groups (formative and post)
- Parent pre and post-survey
  - FY14 – 235 matched pairs
- Texted evaluation questions
  - FY14 - 5 Q's, 1,729 responses
- Dropout interviews (n=128)



**TEXT 2B HEALTHY**  
FOOD AND FUN! TEXTING TIPS FOR FAMILIES

# Lessons Learned

- Importance of strong collaborations
- In-person contact matters!
- Formative evaluation revealed:
  - Widespread use of cell phones (smart phones, in particular) and text messaging
  - Suggestions for appropriate messages (no textisms, personalized)
  - Preferences for timing of messages



# Feeding for Healthy Eating



- Nutrition education for parents of preschool children
  - Focus on feeding practices for young children
  - 6 sessions focus on 3 main themes:
    - Role modeling
    - Cooking and eating together
    - Division of feeding responsibilities
- Parents can receive text or email messages after each class to reinforce session content
  - 3-4 reinforcement messages sent between sessions
  - 13 messages sent after final session to reinforce overall themes
  - 3 evaluative messages requiring participant response



# Feeding for Healthy Eating



- In FY14, 135 participants received messages:
  - 84 enrolled in text messages
  - 51 enrolled in email messages
  - 73% retention

- Sample reinforcement text

Hi! Eat fruits & veggies & your kids will too. Try adding fruit to breakfast!

- Sample evaluative text

Hi! Did your child help you cook a meal this week? Reply 1=yes, 0=no



# Feeding for Healthy Eating



- Educator Role
  - Messages are pre-scripted and based on lessons taught
  - Educators alert FHE Texting Team of lesson taught and date of upcoming class
  - Provides personal connection at “enrollment”
- Audience Type
  - Texting available for educators to offer to consistent and inconsistent audience types
  - Primarily used with inconsistent audience



# Program Comparison

- Major differences between texting programs:
  - Target Audience
  - Mode of delivery for educational messages
    - In-person vs. text
  - Target of the text messages
  - Timing of evaluation messages
  - Duration of program
  - Recruitment process
  - Who coordinates the enrollment and recruitment of participants into the texting component
  - Participation numbers
  - Retention/ dropout rates
  - Response rate for evaluation messages



# Enrollment Challenges with FHE

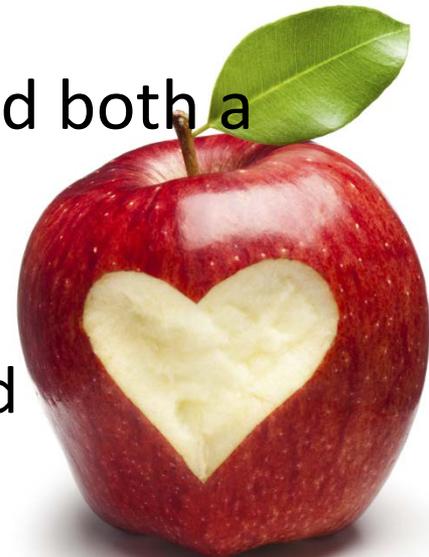
- Low participation in first program year
- Lack of consistent attendance among target audience
- Differences in recruitment strategies and motivation to enroll participants



# Evaluation Challenges with FHE

- No method for assessing attendance at in-person sessions
- Low response rates to evaluation questions
- Substantial dropout rate – over  $\frac{1}{4}$  of participants
- Low response rates to surveys
  - In FY13\*, 10.3% of participants completed both a pre- and a post-test

\* FY13 is most recent year of survey data analyzed



# Discussion Points

- Increasing participation in FHE
  - From educator perspective – increasing “buy-in”
  - From participant perspective
- Collecting texted (or other form of) attendance records
- Utilizing alternative evaluation procedures
  - Texted evaluation questions between classes
  - Sweepstakes/incentives
  - More robust survey tool



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# Questions?

Nicole Finkbeiner, PhD

[nicole4@umd.edu](mailto:nicole4@umd.edu)

Evaluation and Reporting Coordinator  
University of Maryland Extension

Maryland Food Supplement Nutrition Education Program

