

# 'NEXT PRACTICES' REQUIRES COLLABORATION TO SOLVE COMPLEX ISSUES: A CASE FOR CHILDOBESITY180

Christina Economos, Ph.D.  
New Balance Chair in Childhood Nutrition  
Professor, Director of ChildObesity180  
July 31, 2016



# FUNDING DISCLOSURE

## CURRENT FUNDING

- National Institutes of Health: multiple grants
- United States Department of Agriculture: multiple grants
- Robert Wood Johnson Foundation
- JPB Foundation
- New Balance Foundation
- The Boston Foundation
- Newman's Own Foundation
- Dolan Family Foundation
- New Balance Chair in Childhood Nutrition

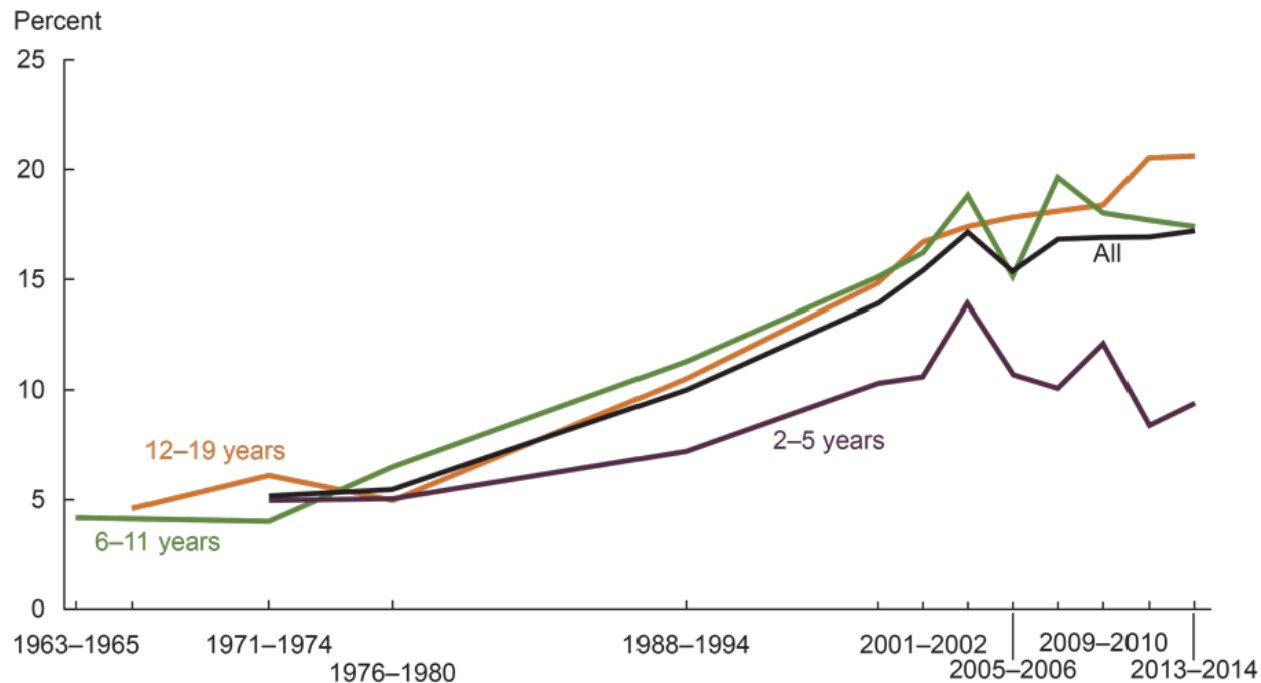
## ADDITIONAL FUNDING (WITHIN PAST 5 YEARS)

- Harvard Pilgrim Healthcare Foundation
- American Heart Association



# CHILDHOOD OBESITY NATIONAL TRENDS

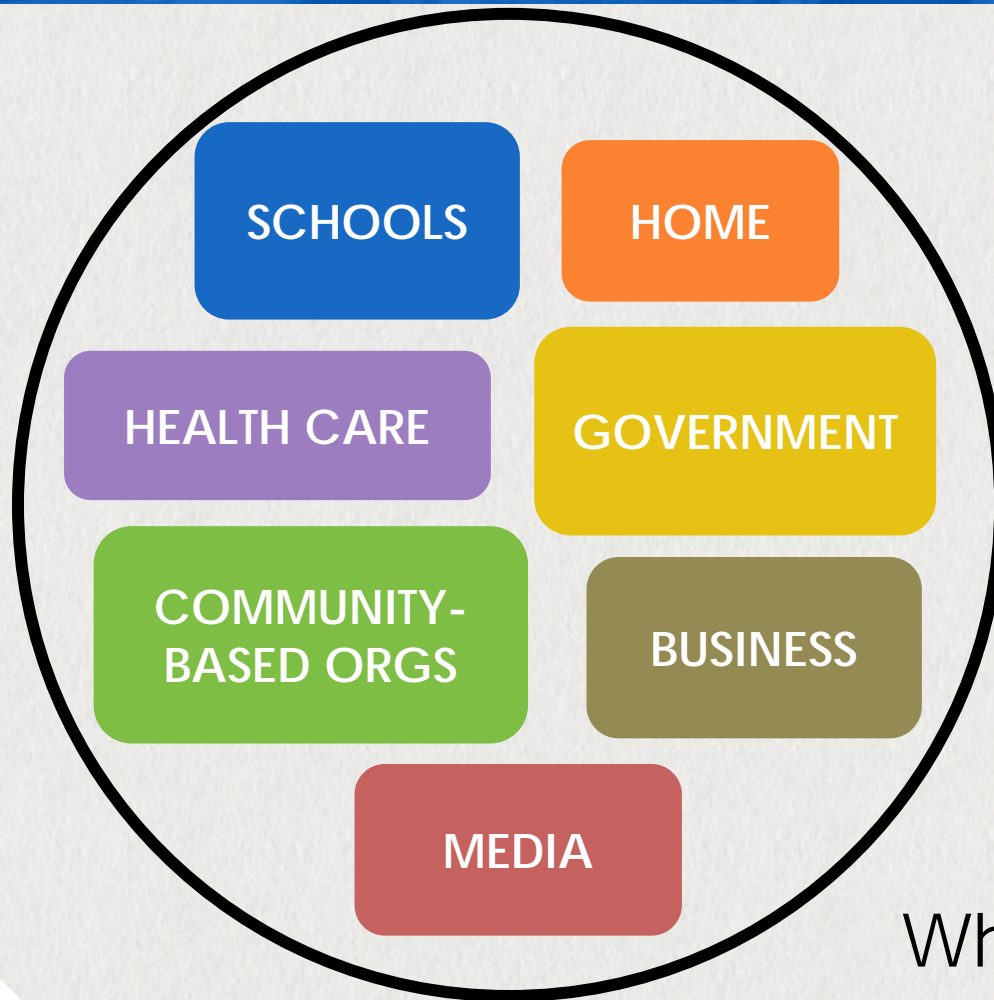
**Figure. Trends in obesity among children and adolescents aged 2–19 years, by age: United States, 1963–1965 through 2013–2014**



NOTES: Obesity is defined as body mass index (BMI) greater than or equal to the 95th percentile from the sex-specific BMI-for-age 2000 CDC Growth Charts.  
SOURCES: NCHS, National Health Examination Surveys II (ages 6–11) and III (ages 12–17); and National Health and Nutrition Examination Surveys (NHANES) I–III, and NHANES 1999–2000, 2001–2002, 2003–2004, 2005–2006, 2007–2008, 2009–2010, 2011–2012, and 2013–2014.

Health E-Stats. July 2016

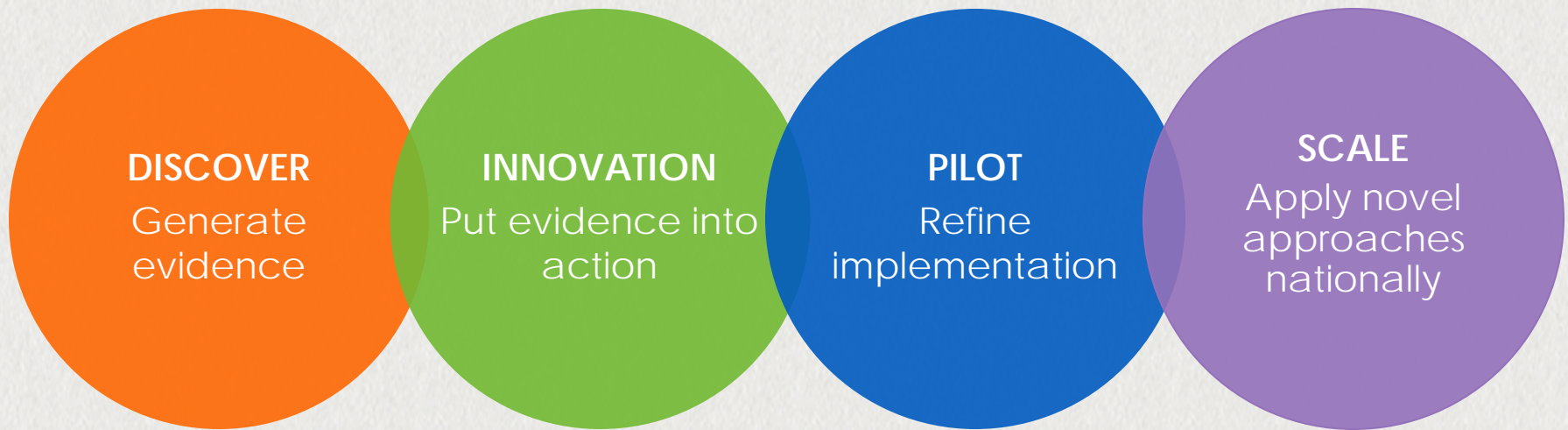
# HOW WE MUST WORK



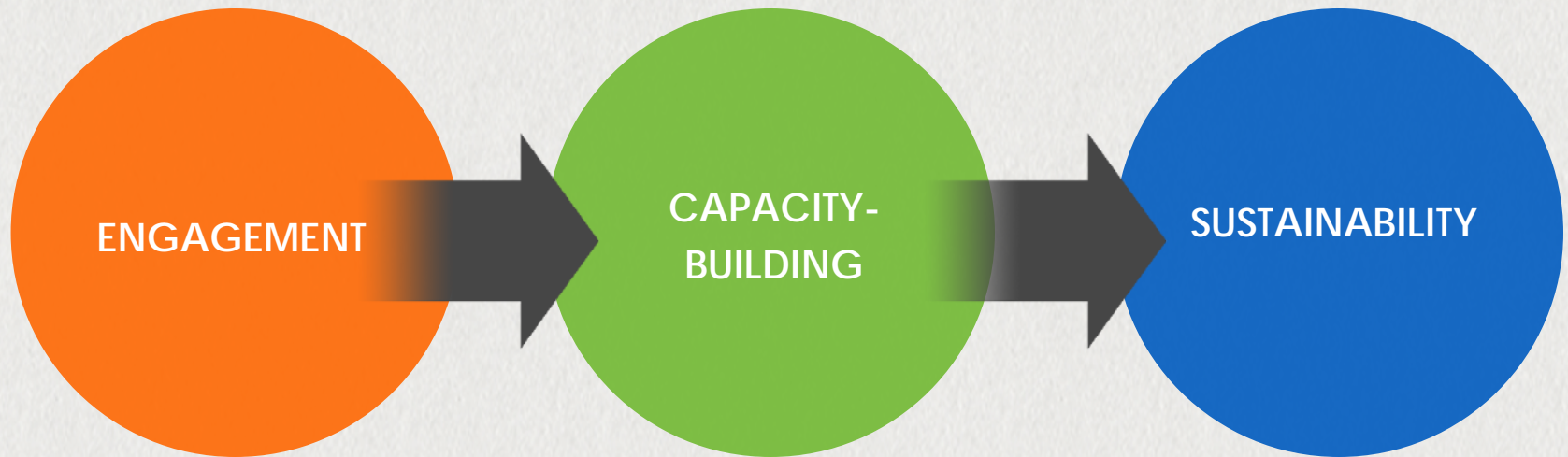
Where we're going...



# CREATING IMPACT



# CONDUCTING COMMUNITY INTERVENTIONS



[Current Obesity Reports](#). Springer. 2014, 199-205, DOI: 10.1007/s13679-014-0102-2.



# SHAPE UP SOMERVILLE (2002-2005)



Shape Up Somerville:  
Eat Smart. Play Hard.

LOCAL  
GOVERNMENT

HOME

Parent, Child,  
Family

MEDIA

SCHOOL

Child, Teachers,  
Administration,  
Staff

HEALTHCARE

COMMUNITY

Restaurants,  
ethnic groups,  
afterschool  
programs

R06/CCR121519-01 from the Centers for Disease Control and Prevention.  
Additional support by Blue Cross Blue Shield of Massachusetts, United Way of Mass Bay, The US Potato Board, Stonyfield Farm, and Dole Foods

# SHAPE UP SOMERVILLE: RESULTS

## DECREASED

- BMI-z score
- Obesity prevalence
  - Children
  - Parent spillover
- Sugary drink intake
- Screen time

## INCREASED

- Sports and activities
- Policy change
- Healthy restaurant meals
- Overhaul of school food and competitive foods

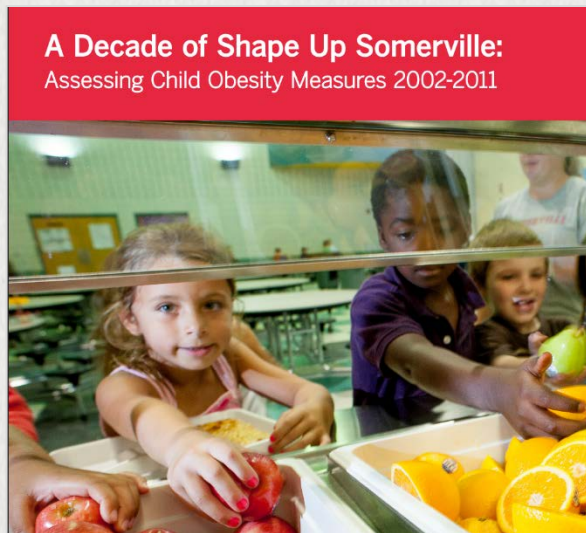
Obesity 2007;15:1325-1336; Prev Med, 2010 Jan; 50 Suppl 1:S97-8; Prev Med 2013; 57(4): 322-7; BMC Pediatrics. 2013; 13(1):157; Prev Chronic Dis, 2009;6(3); Prev Chronic Dis, 2009;6(3); Am J Public Health. 2015 Feb ;105(2):e83-9.





# SHAPE UP SOMERVILLE: SUSTAINABILITY

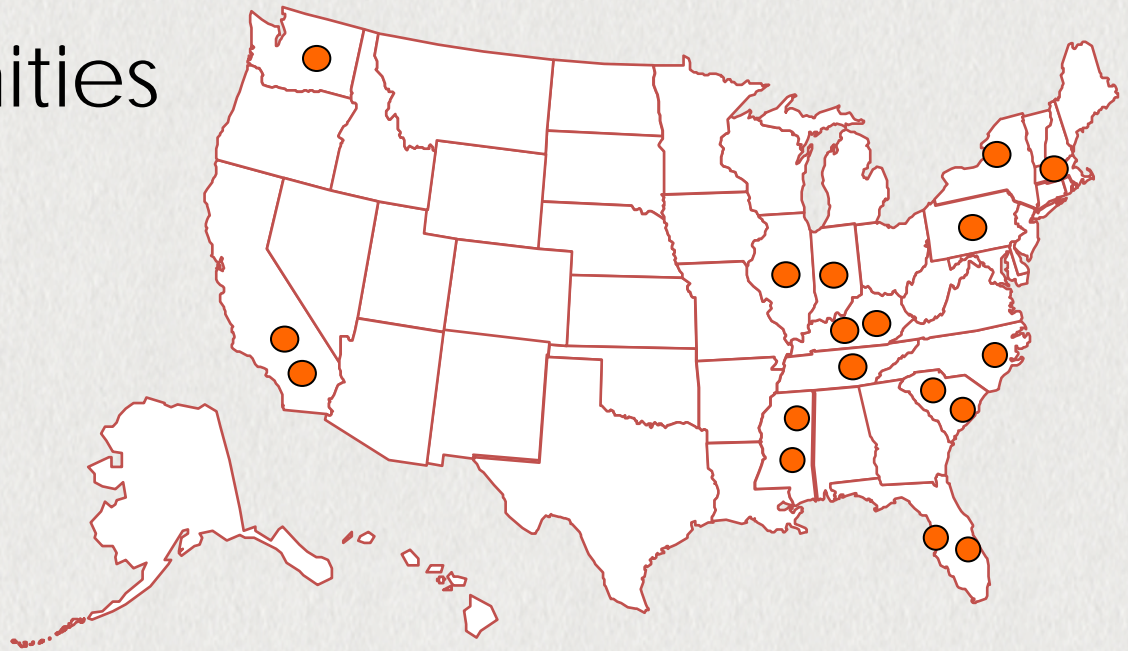
- Sustained and expanded in Somerville
- Informed change at the national level





# REPLICATING SHAPE UP SOMERVILLE (2007-2012)

- 2007-2012
- 18 communities
- 200,000 kids  
= 0.25%



# THE CHILDOBESITY180 APPROACH

Rigor of  
Science

## Impact

Reach 80%  
of children ages  
5-12 nationwide,  
with a health  
equity focus

Innovation  
of Business

[http://www.rwjf.org/en/culture-of-health/2016/03/\\_reversing\\_childhood.html](http://www.rwjf.org/en/culture-of-health/2016/03/_reversing_childhood.html)



# ENGAGING THE PRIVATE SECTOR



Solving problems



Integrating business strategies



Funding our initiatives

# 4 EVIDENCE-BASED INITIATIVES

## Restaurant Initiative

*healthy menus for kids*



**healthy kids**  
out of school



**active schools**  
acceleration project



THE  
**BREAKFAST**  
EFFECT



# A FOCUS ON HEALTH EQUITY

- Purposeful collaborations
- Targeted incentives
- Participatory development
- Tracking of key equity metrics
- Staff professional development
- University involvement
- Data- and community-informed interventions

# RESTAURANT INITIATIVE

Increase demand for, and supply of, healthier options for kids.

<b>Innovation</b>	Make a compelling business case while driving consumer demand.
<b>Rigor</b>	Conduct research to inform direction, add to evidence base, influence supply.
<b>Scale</b>	Execute national campaign to boost demand.

[IJBNPA](#). 2014, 11(1):81. [Obesity](#). 2015; 23(5). [Health Affairs](#). 2015 Nov 1;34(11):1885-92. [Curr Obes Rep](#). 2016 Feb 15. [J Nutr Educ Behav](#). 2016;48 (4): 242-249.



# MOMS' BARRIERS AND MOTIVATION FOR CHOOSING HEALTHIER MENU OPTIONS

Hectic lives

Not the best choice for my child

Eating healthy at fast food = expensive, not satisfying

Very price sensitive

Want to raise healthy kids

No time to cook

Cooking is more expensive

Want kids to learn healthy habits

"My child is a reflection of me"

Fast food = good value, convenient

Feel guilty

Want kids to be their best

600 calories not enough for my active child

"I know I shouldn't"

Want kids to be satisfied

Posted calorie info nice to have, won't change purchase

Way to treat kids



# PILOTING THE CAMPAIGN



**YOU WOULDN'T GIVE THEM THE KEYS TO THE CAR.**

**WHY GIVE THEM AN ADULT-SIZED MEAL?**

THEY'RE KIDS. ORDER THEIR MEALS FROM THE KIDS' MENU.

**YOU'RE THE mom.org**

**ADULT-SIZED MEAL**

**0 CALORIES**



**YOU'RE THE mom.ORG**

USE YOUR MAM-THUPTY OF HEALTHY.



**ADULT-SIZED MEALS?**

THEY'RE KIDS. ORDER THEIR MEALS FROM THE KIDS' MENU.

**YOU'RE THE mom.org**





# ACTIVE SCHOOLS ACCELERATION PROJECT

Increase quality physical activity in schools.

<b>Innovation</b>	Crowdsource school-based PA programs.
<b>Rigor</b>	Pilot and evaluate 3 promising programs in 1000 schools.
<b>Scale</b>	Ignite nationwide walking/running movement.

[Translational Journal of the American College of Sports Medicine](#). 2016 1(1): 1-9. [Int J Behav Nutr Phys Act](#). 2016, 13(1):39

# BILLION MILE RACE



**BILLION MILE RACE**  
TUFTS UNIVERSITY FRIEDMAN SCHOOL

HOW?

WHO'S IN?

CALCULATOR

GRANTS

100 MILE CLUB

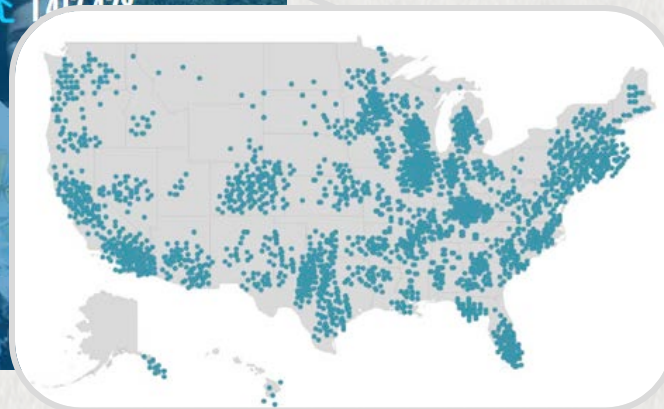
035,430,591

MILES

5,674  
SCHOOLS

1,412,429

Walk, Skip, Run.  
**YOU'RE INVITED, RACE WITH**



Friedman School of  
Nutrition Science and Policy

child **obesity180**  
reverse the trend.



# 2016 SHOE MAKEOVER: BOWLING GREEN, KY





# COLLABORATION WITH WNET





# HEALTHY KIDS OUT OF SCHOOL

Improve nutrition and increase PA in out-of-school-time programs.

<b>Innovation</b>	Engage nine OST CEOs to develop and adopt 3 consistent, simple principles.
<b>Rigor</b>	Evaluate tailored implementation mechanisms across 3 states.
<b>Scale</b>	Embed tailored programs within structure of national organizations.

# PRINCIPLES AND PARTNERS



**Drink Right:** Choose water over sugary beverages.

**Move More:** Boost movement and physical activity.

**Snack Smart:** Fuel up on fruits and vegetables.



[Prev Chronic Dis. 2014 Dec. 31;11:E227.](#) [Prev Chronic Dis. 2015; 12\(E225\).](#) [J Nutr Educ Behav. 2014, 46\(3\):156-163.](#) [Childhood Obesity. 2015; 11\(4\).](#)



# STRONG GIRLS HEALTHY MEETING PATCH



# THE BREAKFAST EFFECT

Advance the evidence base around school breakfast.

<b>Innovation</b>	Leverage natural experiment to study the effect of Breakfast in the Classroom (BIC).
<b>Rigor</b>	Assess individual- and school-level outcomes in schools with BIC.
<b>Scale</b>	Produce video series to share research in support of school breakfast.

[JAMA Pediatrics](#). 2015; 169 (1): 71-77. [Public Health Nutrition](#). 2014. [Pediatr Obes](#). 2016 Feb 4. [Public Health Nutr](#). 2016, Jan 28:1-11



# BREAKFAST IN THE CLASSROOM



# BREAKFAST EFFECT VIDEO SERIES



## THE BREAKFAST EFFECT



The Breakfast Effect

Subscribe

Home **Videos** Playlists Channels Discussion About

← Uploads

Date added (oldest) Grid



How does school breakfast affect academic achievement?

2,732 views • 2 years ago



How does school breakfast impact children's nutrition?

1,631 views • 2 years ago



Should school breakfast be served in the classroom?

804 views • 2 years ago



How does school breakfast affect children's health?

1,217 views • 2 years ago



Is "Universal Free Breakfast" the way to go?

661 views • 2 years ago



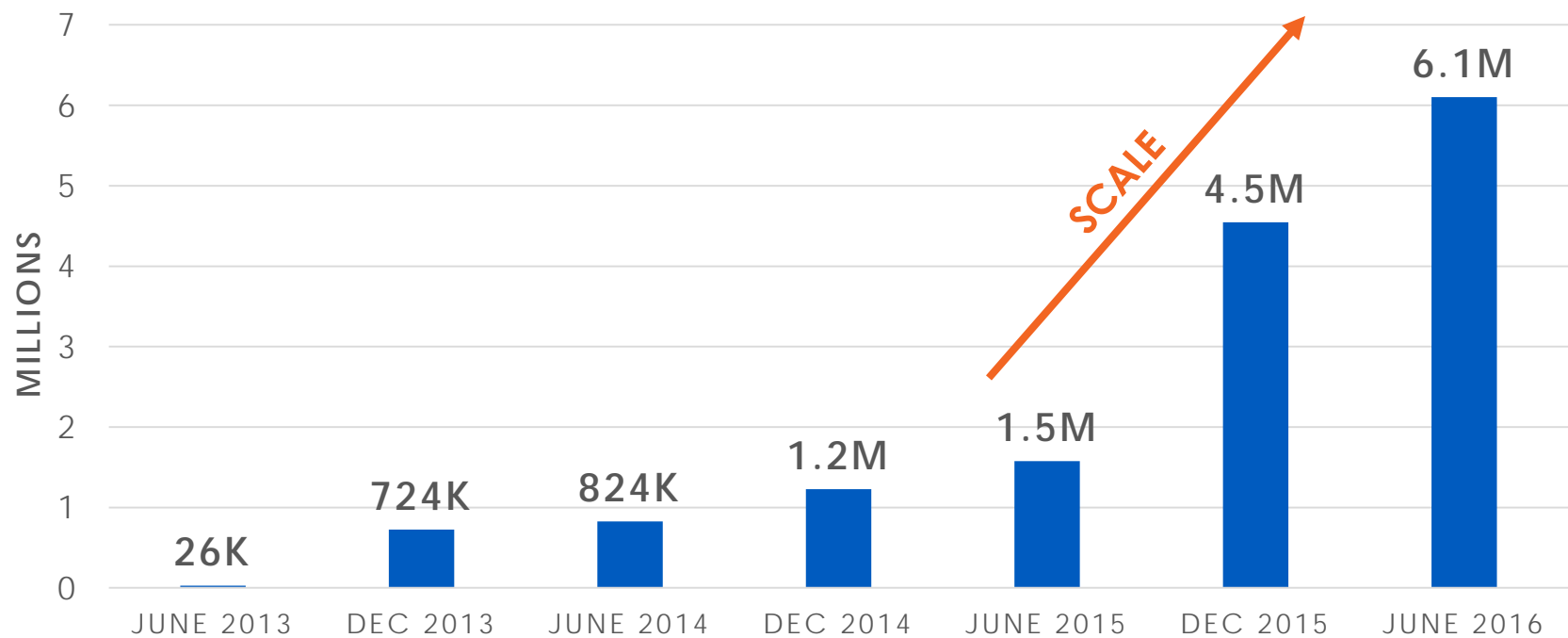
Introduction to The Breakfast Effect Video Series

601 views • 2 years ago

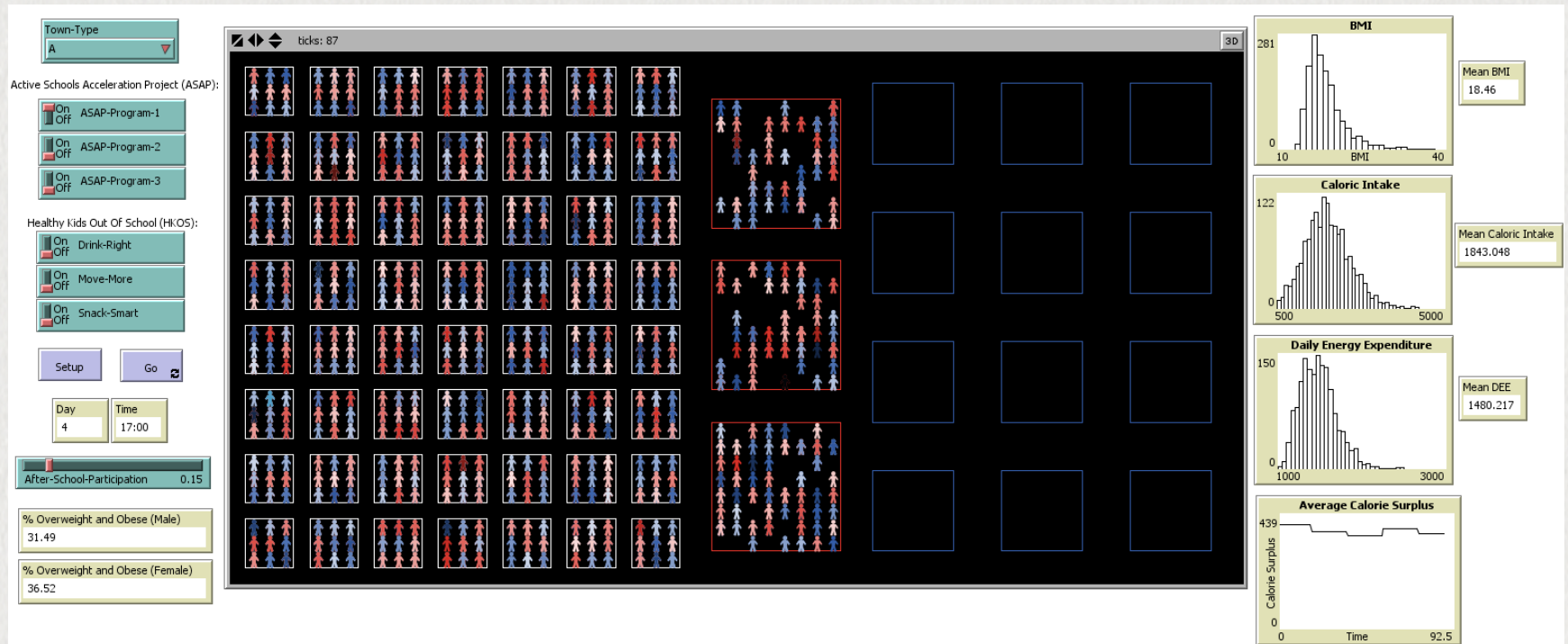




# CHILDREN REACHED



# AGENT-BASED MODELING



Preventing Chronic Disease, 2016 Jan;13:E04.



# CHALLENGES OF OUR APPROACH

Academic rigor vs. speed to market

Grassroots relationship-building vs. national scale

Achieving broad reach vs. prioritizing highest-risk children



# ACKNOWLEDGMENTS





# WHAT YOU CAN DO

- Connect and collaborate with colleagues in other sectors
  - e.g., business, health care, education
- Educate yourself on systems thinking and approaches
- Evaluate your work - use rigor and innovative methods
- Scale/expand your programming to other locations or cities and/or a wider group of children within your organization
- Join us!

# JOIN US



[ChildObesity180.org](http://ChildObesity180.org)



[BillionMileRace.org](http://BillionMileRace.org)



[HealthyKidsHub.org](http://HealthyKidsHub.org)

**Restaurant  
Initiative**

*healthy menus for kids*

[ChildObesity180.org/HealthyMeals](http://ChildObesity180.org/HealthyMeals)



[ChildObesity180.org/Breakfast](http://ChildObesity180.org/Breakfast)





THANK YOU!