

# Case studies in strategic science to inform public policy

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**YALE RUDD CENTER**  
FOR FOOD POLICY & OBESITY

# Agenda

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- Defining “strategic science”
- Marketing sugary cereals to children
- State competitive foods law
- Sugar-sweetened beverages tax

# Strategic Science

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## Definition:

- Science designed to inform and affect social and policy change

# 1. Identify Change Agents

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- Legislators: Local, state, federal
- Regulators (e.g., FTC, FCC)
- Industry: Food, media
- Advocates
- Public health community
- Schools
- Attorneys general
- Press and other media
- General public: Consumers, parents, constituents

## 2. Develop Strategic Questions

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What piece of science would inform and/or help implement effective public policy?

# 3. Conduct the Science

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- Timely
- Applied vs. programmatic
- Academic standards
- Understandable to non-scientists

## 4. Communication

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Disseminate research findings

- Customized for key audiences

Solicit new research ideas

# Keys to Success

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- Multi-disciplinary approach
- Outside the “Ivory Tower”
- Consider counter-arguments and barriers to change
- Speak language of change agents
- Foster two-way communication

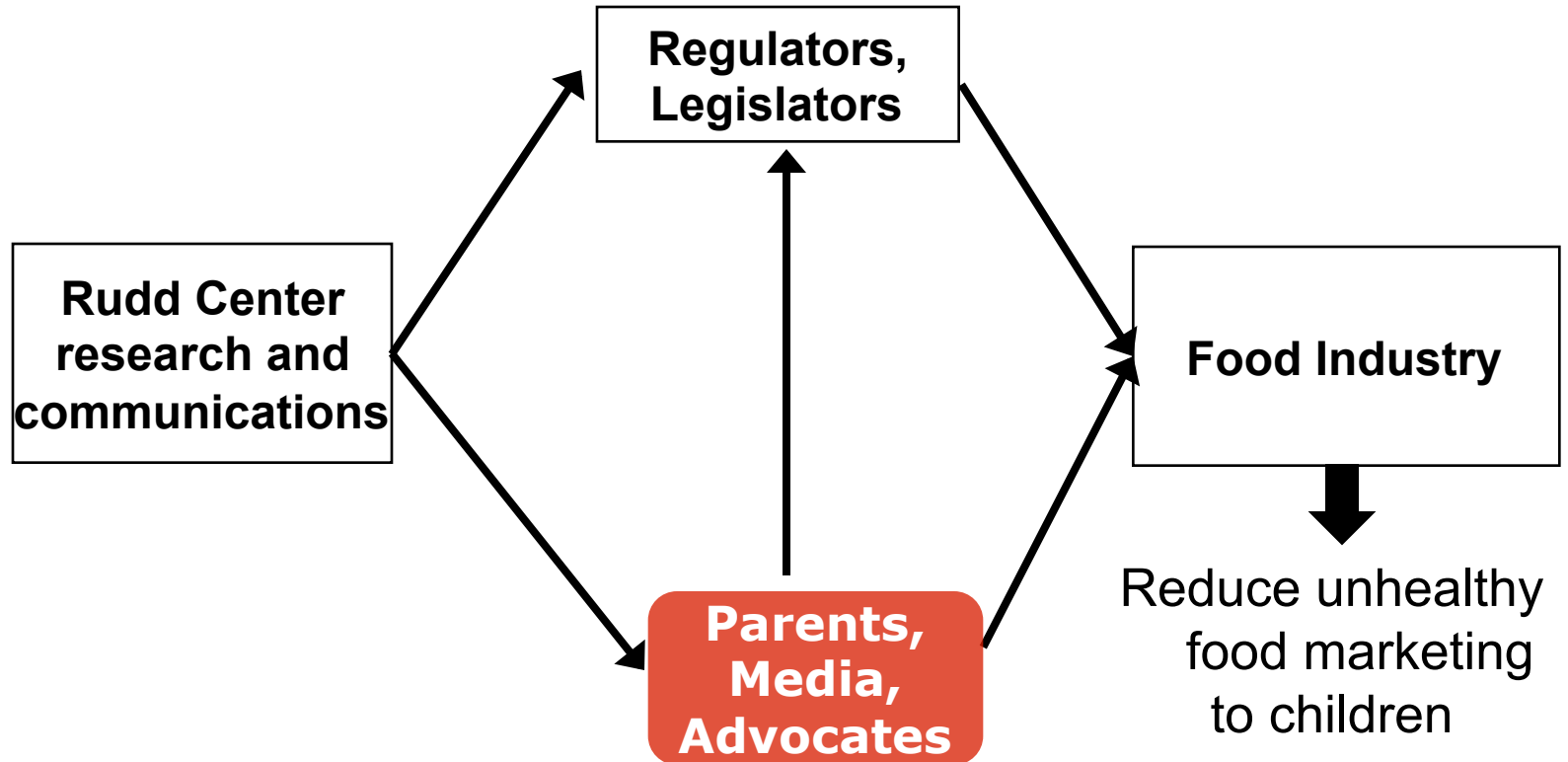


# Case Study 1

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Reducing marketing of sugary  
cereals to children

# Key Change Agents



Awareness  
(extent and impact)



Outrage



Advocacy

# Why Cereals?

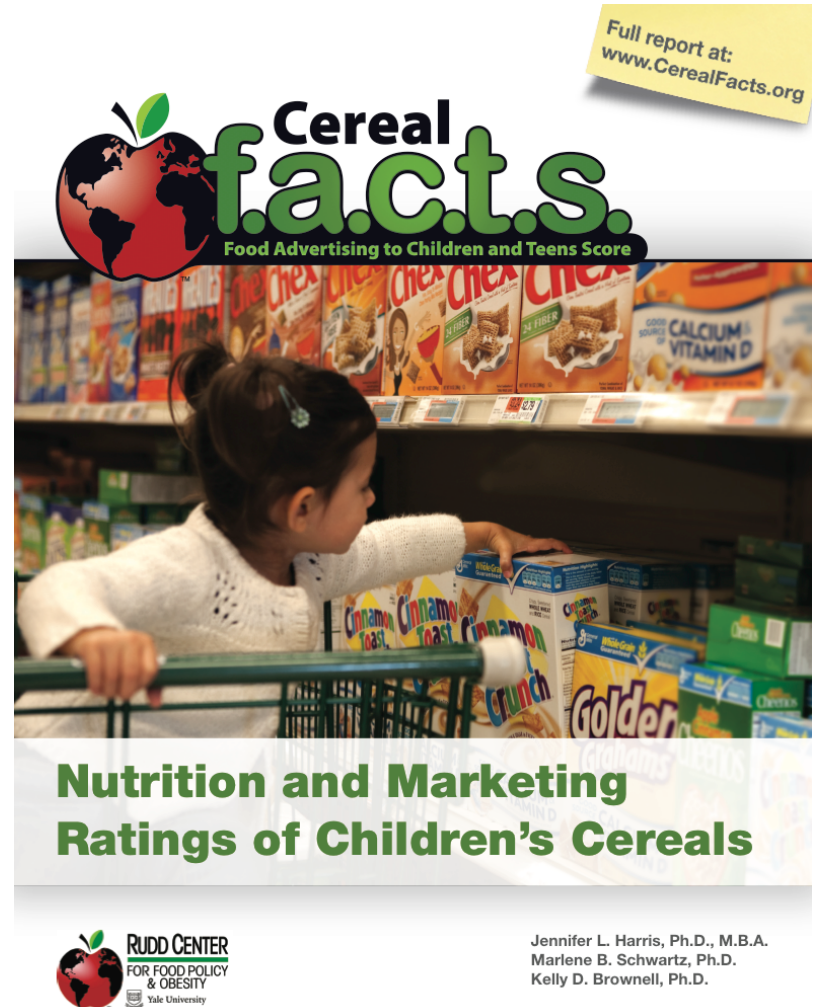
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- Most marketing to children
- Disproportionately target children with worst products (*JADA*, 2008)
- Self-regulatory pledges by General Mills, Kellogg and Post

# Increase Awareness

Comprehensive evaluation:

- Nutrition quality of child-targeted vs. other products
- Quantity and quality of marketing to children



# Barrier to Change?

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- “Food does not become nutrition until it is eaten.”
- “Children like the taste of ready-to-eat cereals and are therefore more likely to eat breakfast.”

Celeste Clarke, PhD, Kellogg Company

Susan J. Crockett, PhD, RD, General Mills

- *JADA*, 2008

# Children Will Eat Low-Sugar Cereals

## Effects of Serving High-Sugar Cereals on Children's Breakfast-Eating Behavior

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### KEY WORDS

obesity, children, food marketing, cereal, breakfast, nutrition

### ABBREVIATION

RTE—ready-to-eat

[www.pediatrics.org/cgi/doi/10.1542/peds.2010-0864](http://www.pediatrics.org/cgi/doi/10.1542/peds.2010-0864)

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**WHAT'S KNOWN ON THIS SUBJECT:** There are positive health benefits for children who consume ready-to-eat cereals for breakfast; however, cereal companies market their high-sugar products extensively to children, which causes concern that eating these products contributes to unhealthy levels of added sugar in children's diets.

**WHAT THIS STUDY ADDS:** Results demonstrate the potential negative effects of serving high-sugar cereal to children and how it affects their consumption of cereal, added sugar, and fruit during breakfast. In addition, they demonstrate that children like and will eat low-sugar cereals as an alternative.

## abstract

FREE

**OBJECTIVES:** To test (1) whether children will consume low-sugar ready-to-eat (RTE) cereals and (2) the effects of serving high- versus

# Evaluate Marketing Impact

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- Playing unhealthy advergames increases unhealthy snack consumption (*Journal of Children and Media*, 2011)
- Nutrition-related claims on children's cereals lead parents to infer they are healthier (*Public Health Nutrition*, 2011)
- Advertising to children increases sales 13X (*Public Health Nutrition*, 2011)

# Communications Campaign

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## Results were “news”

- Time, ABC News, USA Today, AP, LA Times, Chicago Tribune, Fox, NBC, CBS
- >400 press mentions in national and local TV, radio, print, blogs

## Website for parents

- >68,000 visits

## Policymaker outreach



# Industry Response

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- General Mills PR campaign “benefits of cereal”
- General Mills and Post announced reduced sugar in children’s cereals
- PepsiCo discontinued Cap’n Crunch website
- General Mills, Kellogg and Post agreed to meet

# Three Years Later...

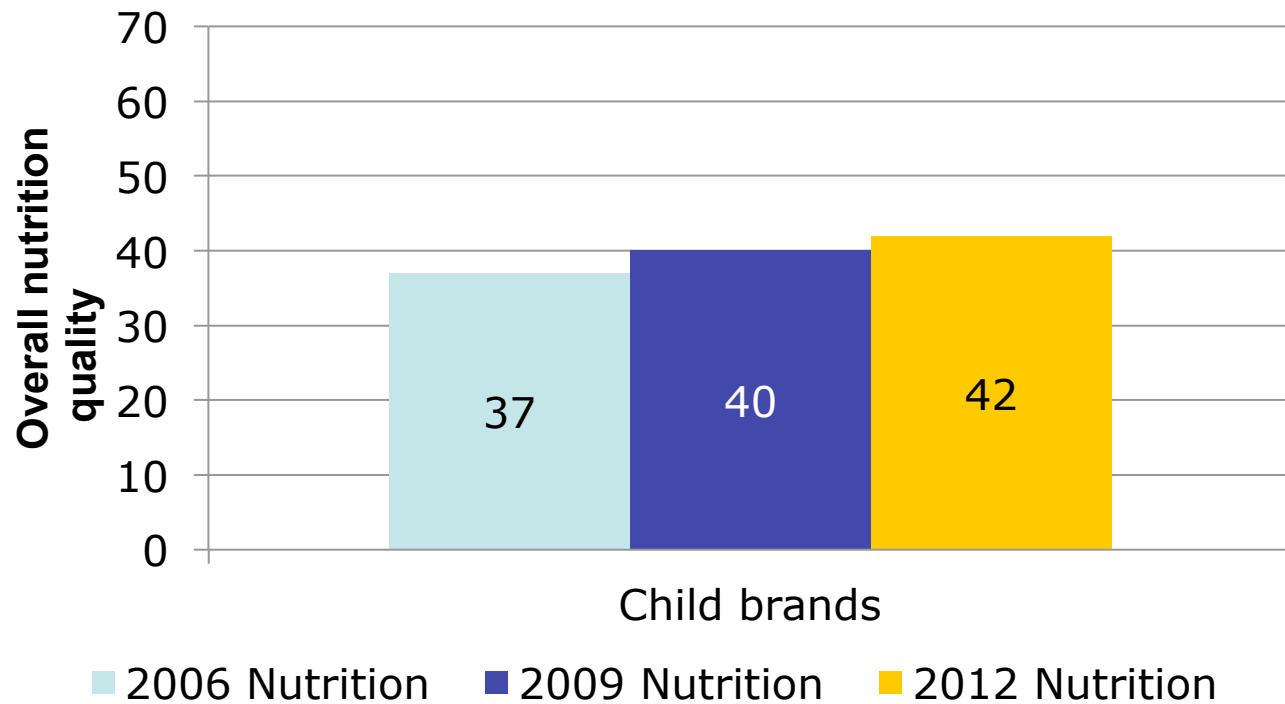


- Two most-visited advergame websites were discontinued

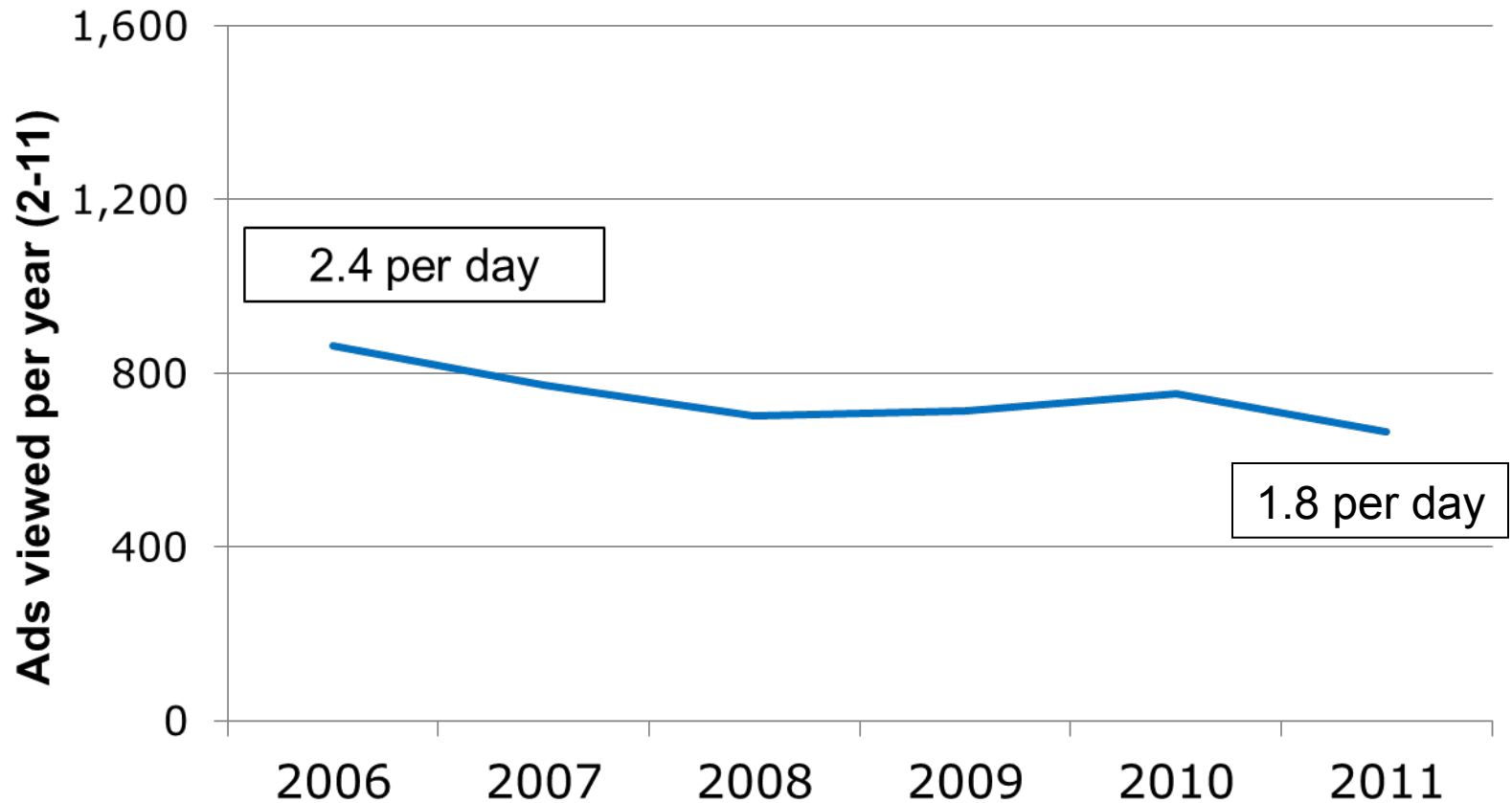


# Nutrition Quality

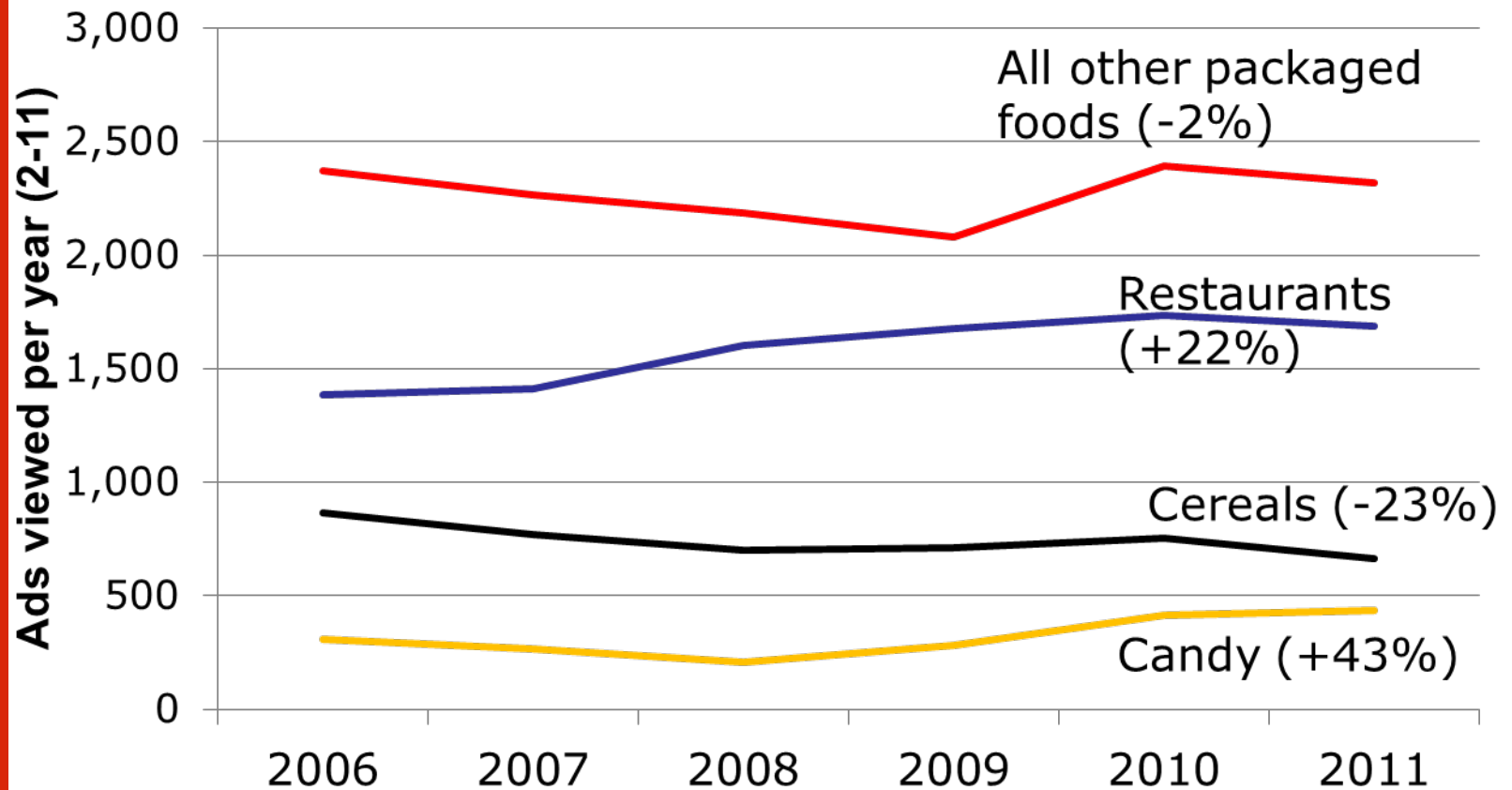
- Improved for 13 of 16 child brands



# Reduced TV Ads to Children



# More Than Other Categories



# Bottom-Line

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Cereal marketing to children still has a long way to go

- Cereal remains the most-advertised packaged food/beverage to children
- Companies continue to advertise their worst products to children
- Marketing techniques and target audiences expanding

# Child-Targeted Cereals: 2012



# Case Study 2

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## Advocating for and Evaluating a State Competitive Foods Law

Kathryn Henderson



# CT Healthy Food Certification

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- Standards for competitive foods
- Monetary incentive tied to meal participation (10 cents per meal)
- Limits fat, saturated fat, trans fats, sugar, sodium, portion sizes, calories

# Back to the Beginning...

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- 2004 law
  - Healthy foods required when unhealthy foods are available
- 2004 legislative effort
  - Bill introduced: nutrition standards for all foods sold in schools
  - Defeated

# Where's the evidence...

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- 2003 - 2005: USDA Team Nutrition Grant
  - CT State Department of Education and Rudd Center partnership
- 8<sup>th</sup> grade students in 6 schools (3 intervention, **3 comparison**)
- Intervention: remove all unhealthy snacks and beverages

# Key Questions

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- Will children buy the healthy foods?
- Can schools stay afloat financially?
- Will children compensate by eating more unhealthy foods out of school?
- Will the restrictions increase body dissatisfaction or disordered eating behaviors?

# Results

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- Children purchased healthy snacks
- Food services were financially solvent
- No compensation in home snacking
- No increased dieting behaviors or body dissatisfaction

# Passing A Law

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- 2005: Senate President Donald Williams introduces bill
  - Mandatory competitive food standards
  - Beverage restrictions
  - Research data presented at press conference
  - Bill passes House, Senate
    - Governor vetoes bill

# Passing A Law: Take 2

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- 2006: Sen. Williams reintroduces bill
  - Voluntary, incentivized standards
  - Beverage restrictions (no diet)
  - Presentation of research data for School Nutrition Association
  - Success!

# Post-Mortem

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- Pros/Cons of voluntary and incentive program
  - More palatable to schools
  - Lower overall impact
  - Vulnerable to budget
- Pros/cons of coupling with beverage standards
  - Drew greater lobbying fire
  - Appeased food service directors

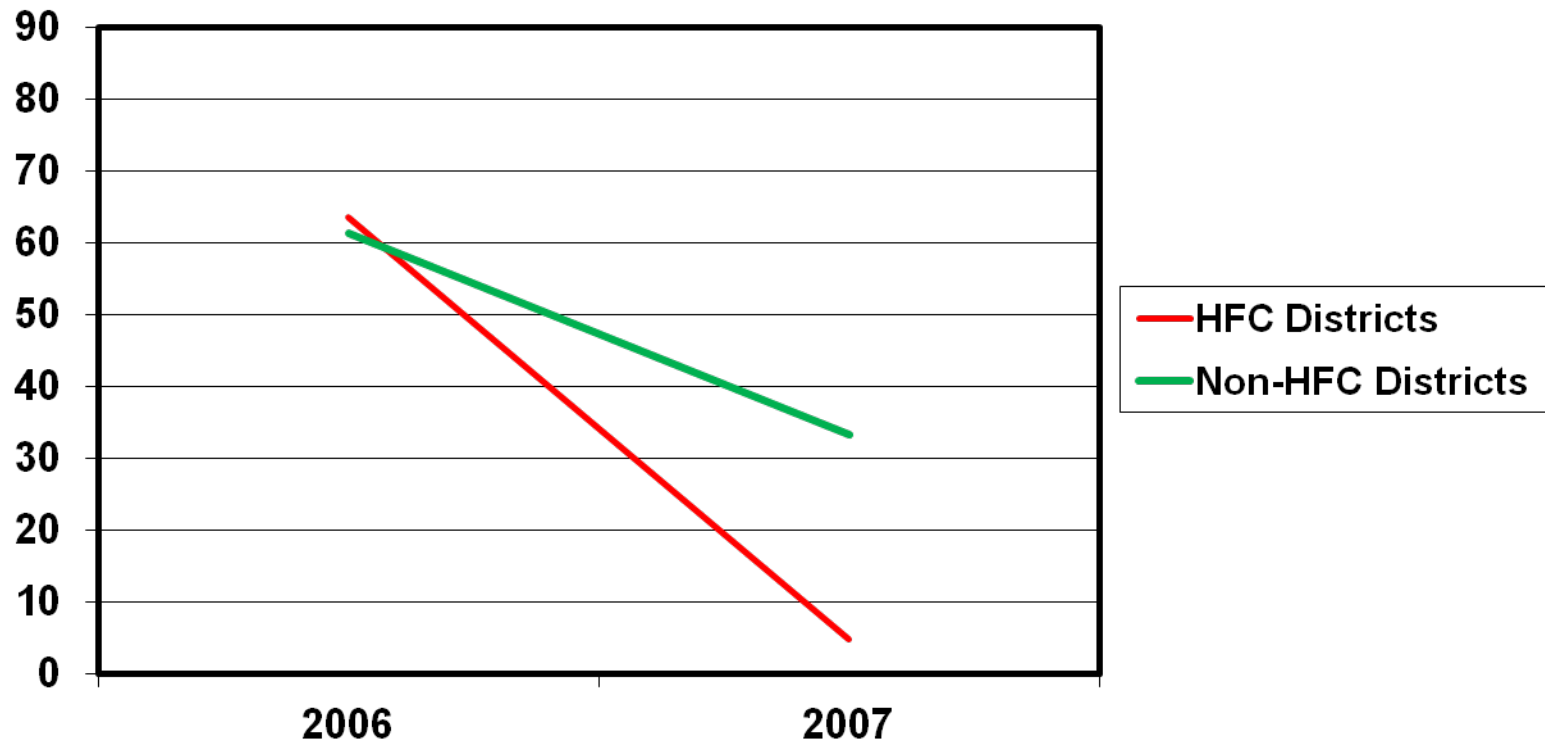


# Evaluating Healthy Food Certification

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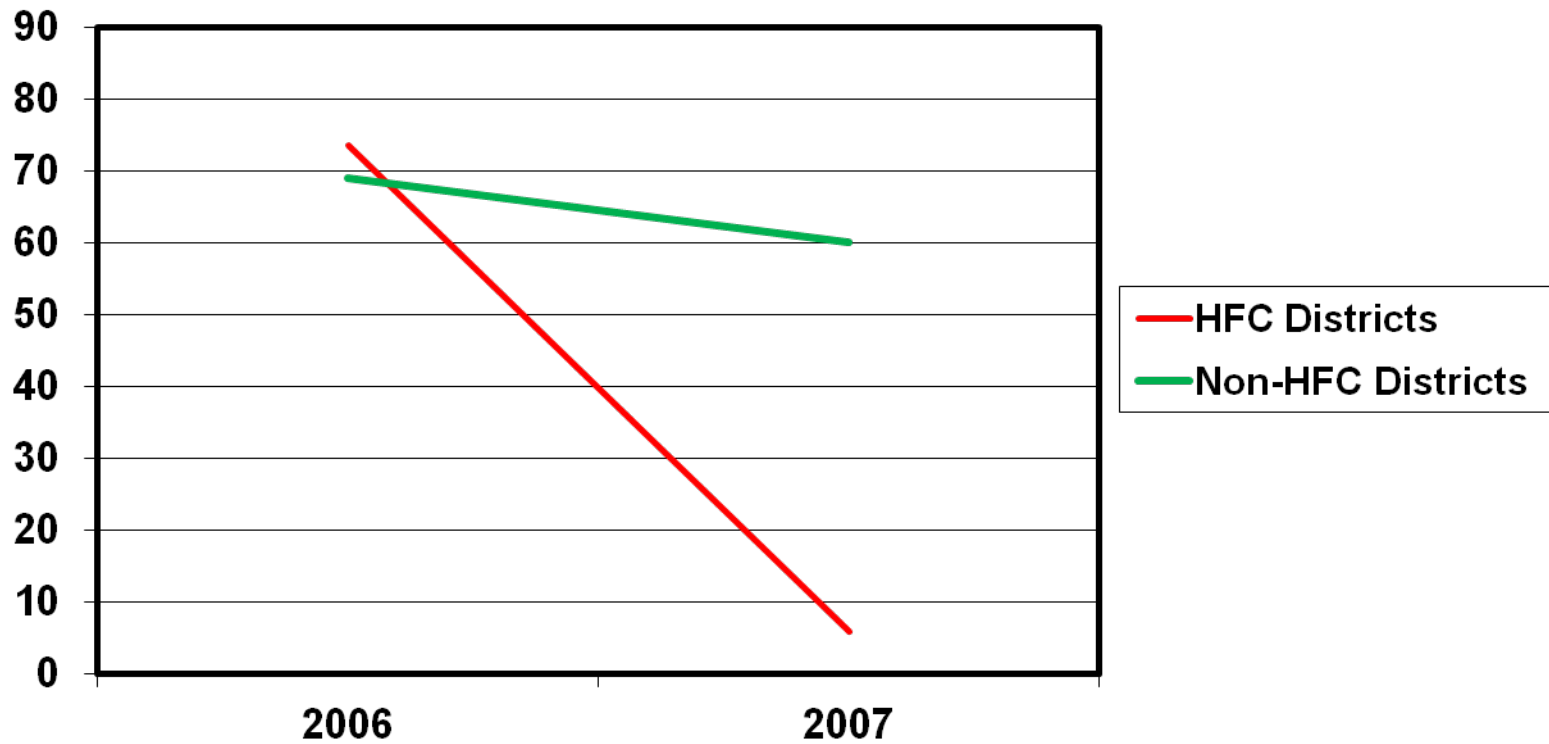
- Necessary due to budget vulnerabilities
- First formal evaluation after first year of program
- 50% participation rate
- State standards vs school wellness policies: the test of “local control”

# Unhealthy a la carte snacks: Elementary School

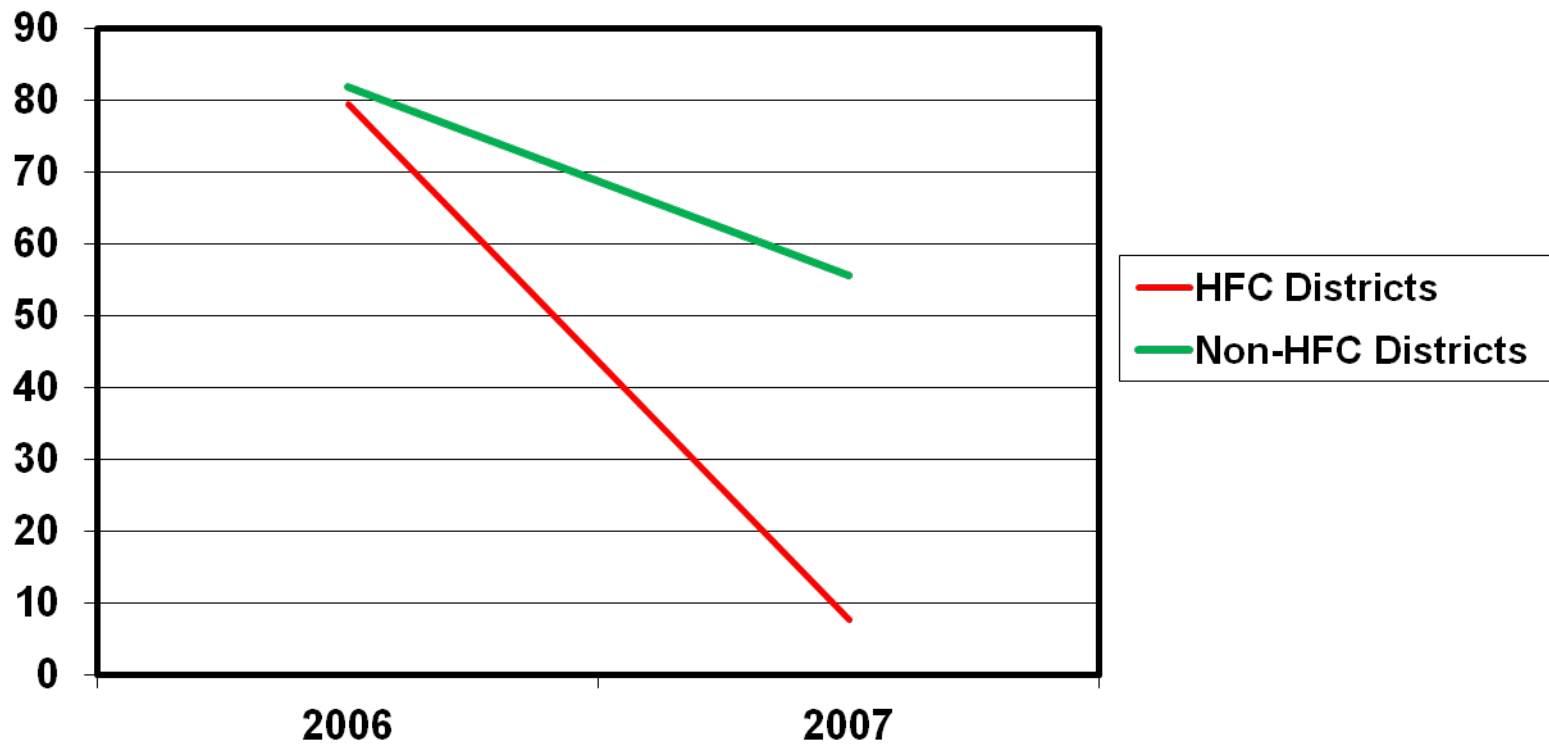


Long MW, Henderson KE, Schwartz MB, Journal of School Health, 2010

# Unhealthy a la carte snacks: Middle School



# Unhealthy a la carte snacks: High School



# HFC Evaluation Update

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- 6 years out
- Increased district participation
  - Now at 74%
- Near 100% recertification

# Financial and Dietary Impact

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- Increase in middle and high school lunch participation
- Participation resulted in \$30,000 in new revenue for an average district in the 2011-2012 school year

# Next Steps

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- Incentive necessitates continued justification
- USDA competitive food standards coming...
  - Redundant program or opportunity to raise the bar?

# Case Study 3

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Using strategic science to  
advocate for sugar-sweetened  
beverage taxes

Roberta Friedman



# Why target SSBs?

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- Consumption rising
- Clear assoc. w. chronic disease
- Source of added sugar
- Heavily marketed, esp. to kids
- Gratuitous caffeine addition
- How best to reduce consumption?

# Who are the change agents?

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- State and local legislators
- Public health advocates/coalitions
- Local/state public health departments
- The public

# What are the barriers? Who is the opposition?

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- Barriers
  - Taxes unpopular (esp. in recession)
  - Conservative (anti-tax) legislatures/governors
  - Industry money
- Opposition
  - Industry and front groups

# The Idea

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- Model: tobacco taxes to reduce consumption
  - Will it work for SSBs?

# Set the Stage: Commentary



## Small Taxes on Soft Drinks and Snack Foods to Promote Health

*Michael F. Jacobson, PhD, and Kelly D. Brownell, PhD*

AJPH, 2000

# Set the Stage: Commentary

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*The* NEW ENGLAND JOURNAL *of* MEDICINE

Perspective  
APRIL 30, 2009

## **Ounces of Prevention — The Public Policy Case for Taxes on Sugared Beverages**

Kelly D. Brownell, Ph.D., and Thomas R. Frieden, M.D., M.P.H.



# Strategic questions

# Are SSBs price-elastic?



## **The Impact of Food Prices on Consumption: A Systematic Review of Research on the Price Elasticity of Demand for Food**

| Tatiana Andreyeva, PhD, Michael W. Long, MPH, and Kelly D. Brownell, PhD



# What Size Tax? Type?



*The NEW ENGLAND JOURNAL of MEDICINE*

## HEALTH POLICY REPORT

### **The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages**

Kelly D. Brownell, Ph.D., Thomas Farley, M.D., M.P.H., Walter C. Willett, M.D., Dr.P.H.,  
Barry M. Popkin, Ph.D., Frank J. Chaloupka, Ph.D., Joseph W. Thompson, M.D., M.P.H.,  
and David S. Ludwig, M.D., Ph.D.

# How much are we drinking?

## Would tax reduce caloric intake?



Contents lists available at [ScienceDirect](#)

Preventive Medicine

journal homepage: [www.elsevier.com/locate/ypmed](http://www.elsevier.com/locate/ypmed)



Estimating the potential of taxes on sugar-sweetened beverages to reduce consumption and generate revenue

Tatiana Andreyeva <sup>a,\*</sup>, Frank J. Chaloupka <sup>b,c</sup>, Kelly D. Brownell <sup>a</sup>

June, 2011

# What to do with revenue?

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# Revenue generation?

## How to interest legislators?



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Home > Revenue Calculator for Soft Drink Taxes

**Revenue Calculator for Sugar-Sweetened Beverage Taxes**

# Communications



→ Legislators,  
Advocates

# TA for Legislators/Advocates

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- ChangeLab Solutions:

**Model Sugar-Sweetened Beverage  
Tax Legislation**

- Help w. responses to industry messaging
- Resources on website

# TA

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- Fact sheets for state advocates
  - Consumption
  - Revenues etc.
- Testimony
- Webinars for advocates
  - Science
  - Taxes in lay terms
  - Effect of penny per-ounce

## Sugar-Sweetened Beverage Tax Legislation

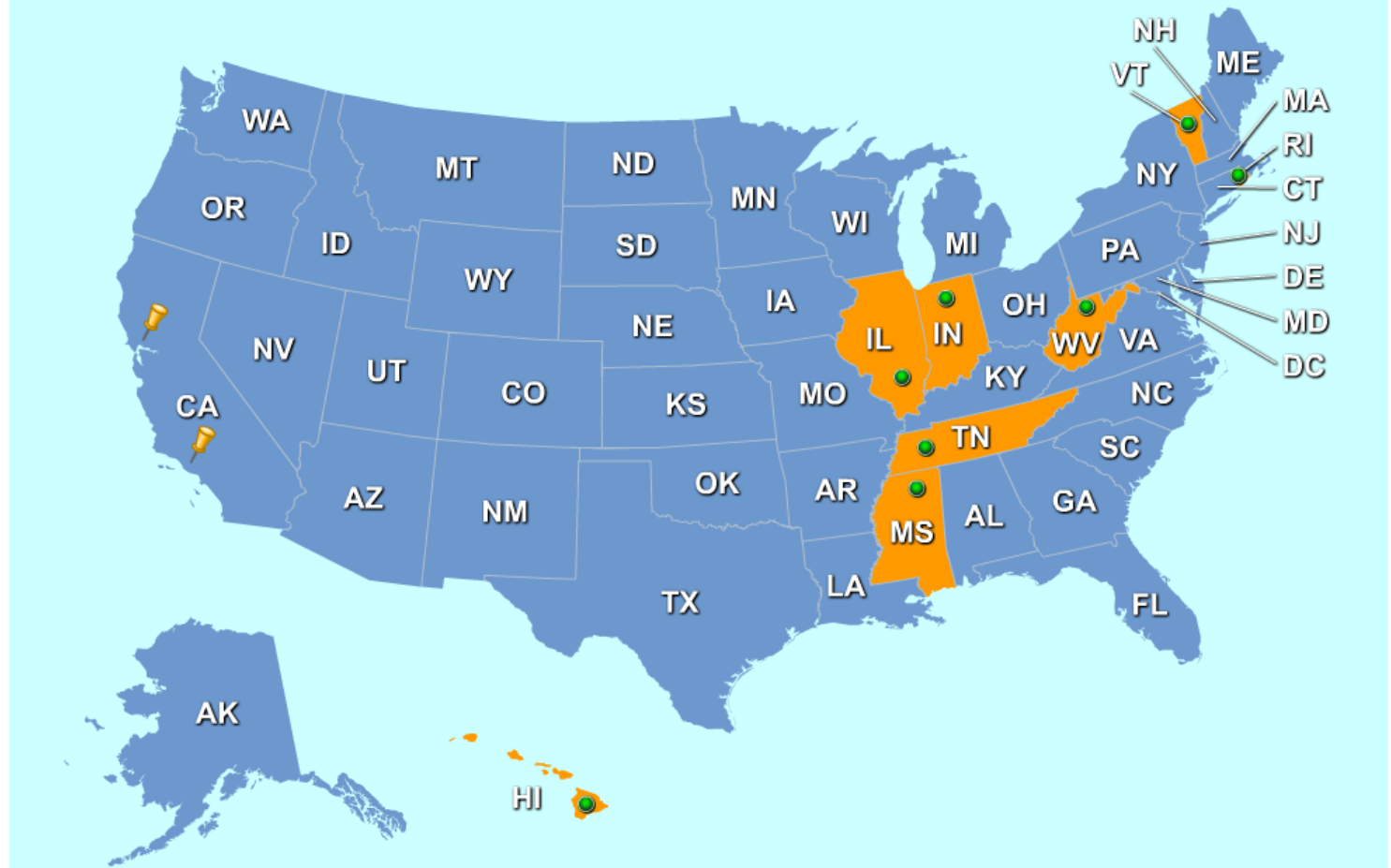
15 states filed as of May 2011



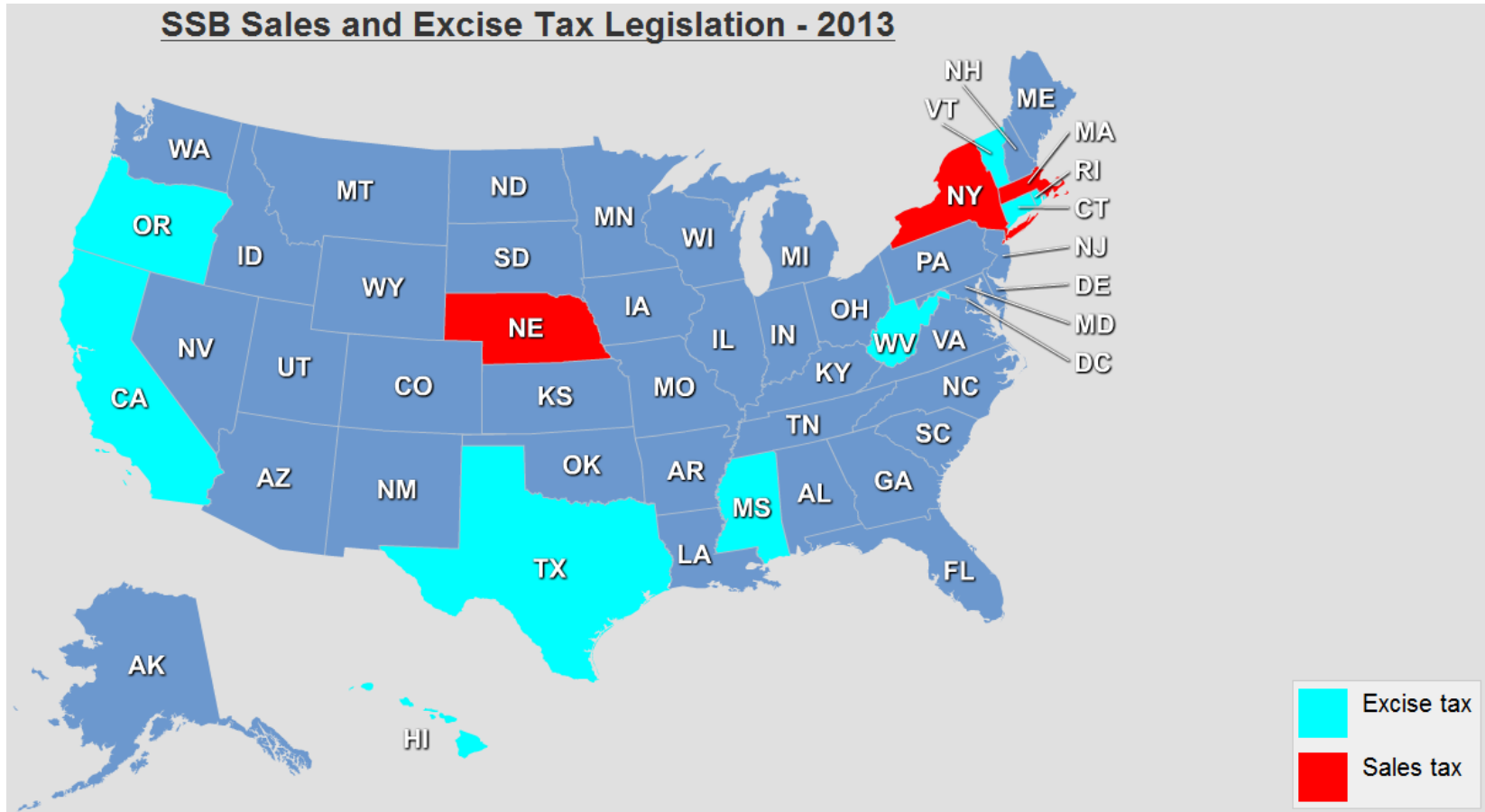


# Legislation 2012

## 8 States and 2 Cities with Sugar-Sweetened Beverage Tax Legislation 2012



# Legislation 2013



# Evaluation?

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- No legislation passed \*yet\*
- All bills need evaluation component

# Thank You!

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- The Rudd Foundation
- USDA
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