

# Child Nutrition in the Schools

Jessica Donze Black RD, MPH

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for a  
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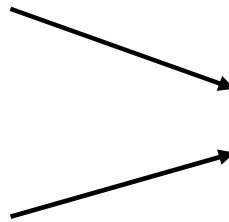


  
Robert Wood Johnson  
Foundation  
*Supporting healthy schools nationwide*

# Reversing the Trend

*To eliminate childhood obesity and inspire all young people in the United States to develop lifelong, healthy habits*

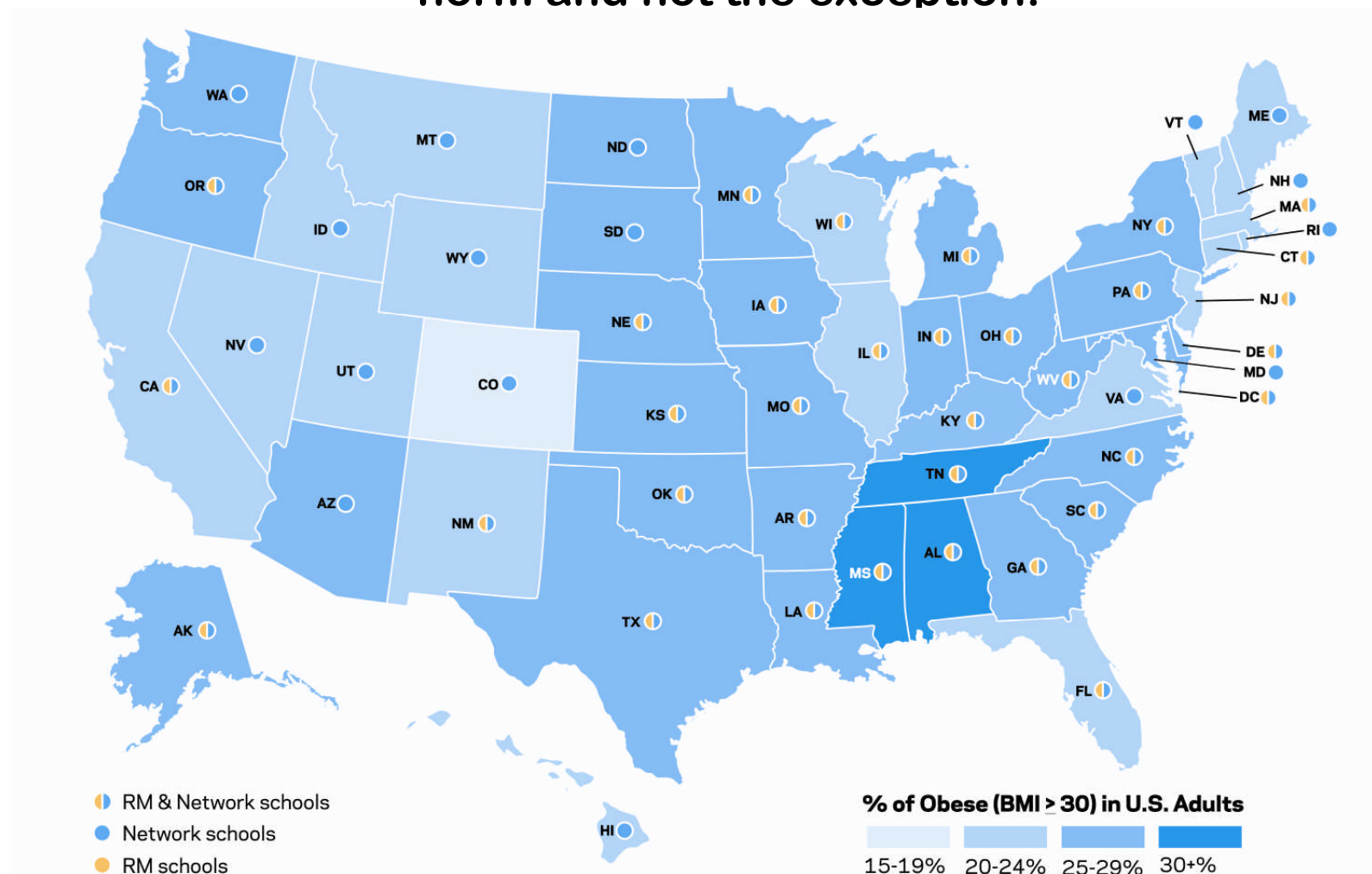
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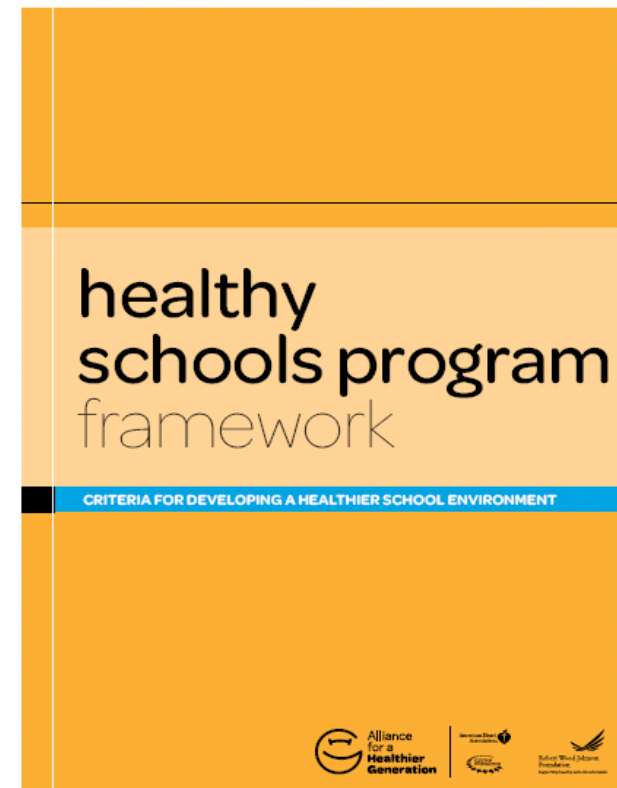


Healthy Schools Program is working to support a culture where schools that promote healthy eating and physical activity are the norm and not the exception.



# Best Practices Framework

- Policy / Systems
- Health Education
- Physical Education
- **School Meals Programs**
- **Competitive Foods & Beverages**
- Physical Activity
- Before & Afterschool Programs
- School Employee Wellness



# The School Nutrition Landscape

- School Breakfast
- School Lunch
- Competitive foods (a la carte, vending, school stores, fund raisers, parties, etc.)
- After school snacks
- Summer feeding program



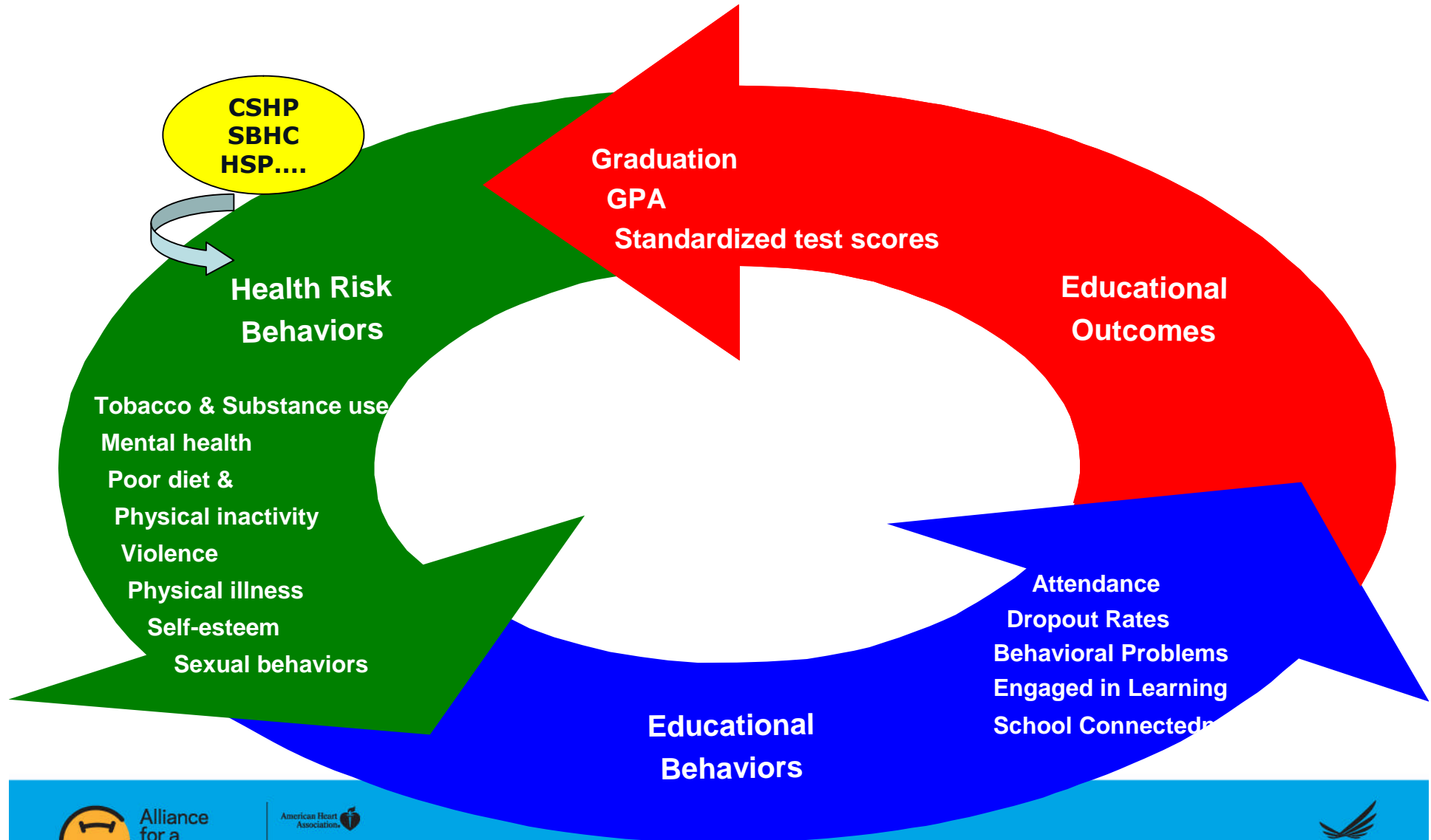
# The National Picture

- 2004 Child Nutrition Reauthorization
  - Wellness Policies
  - School Meal updates
- State Policy change
  - States with nutrition standards for competitive foods grew from 6 in 2004 to 27 in 2009.
  - In 2006, only 38% of schools restricted students from purchasing sugar sweetened beverages such as regular soda and fruit drinks. In 2008, 63% of schools report restricting sugar sweetened beverages. (CDC School Health Profiles, 2008)
- 2009 IOM guidance to USDA on school meals and 2005 Dietary Guidelines
- 2010 (?) Child Nutrition Reauthorization
  - USDA Priorities
  - Additional priorities

# Why Focus on Nutrition in Schools?



***What We Know:***  
***The health-academic outcomes connection***



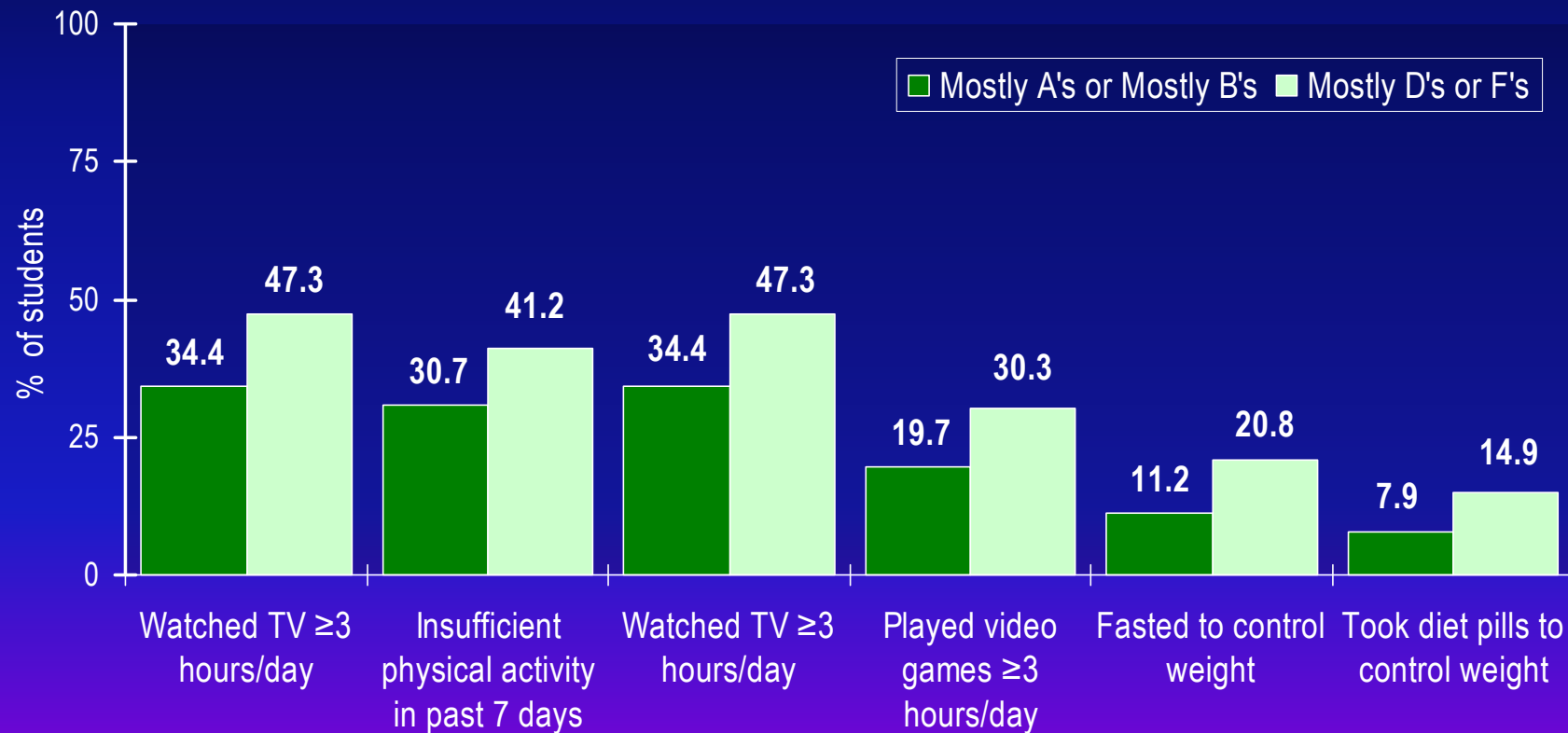


## Growing body of research suggests...

- **Good nutrition is linked to improved student behavior, lower absenteeism, and reduced tardiness**
- **Eating breakfast at school is linked to greater improvements in standardized text scores and math grades.**
- Physical fitness levels predict for better math performance
- Participation in physical activity is consistently related to lower levels of anxiety and stress
- Participation in high activity physical education program may strengthen scores for elementary-age children on standardized tests.
- Physical activity can positively affect concentration, memory, and classroom behaviors.
- **Severely overweight children miss 4 times as much school as normal weight children.**



# Percentage of U.S. High School Students Getting Mostly A's or B's and Mostly D's or F's\* Who Engage in Selected Health Risk Behaviors



\*As reported by students

Unpublished analyses of CDC, National Youth Risk Behavior Survey, 2003

# Participation in the School Breakfast Program and Academic Performance

- Compared to peers who do not participate in the School Breakfast Program, low-income elementary school students who do participate have:
  - greater improvements in standardized test scores and math grades
  - reduced rates of absenteeism, tardiness, and psychosocial problems

*Murphy et al. Arch Pediatr Adolesc Med 1998; Meyers et al. Am J Dis Child 1989*

# Greater Access to Low-Nutrient, Energy Dense Competitive Foods at School is Associated With:

-  intake of total calories, soft drinks, total fat, and saturated fat

Cullen K et al. *JADA* 100(12): 1482-1486; Cullen K & Thompson D. *JADA* 105(12): 1952-1954

-  intake of fruits, vegetables, milk, and key nutrients

Cullen K & Zakeri I. *AJPH* 94(3): 463-467

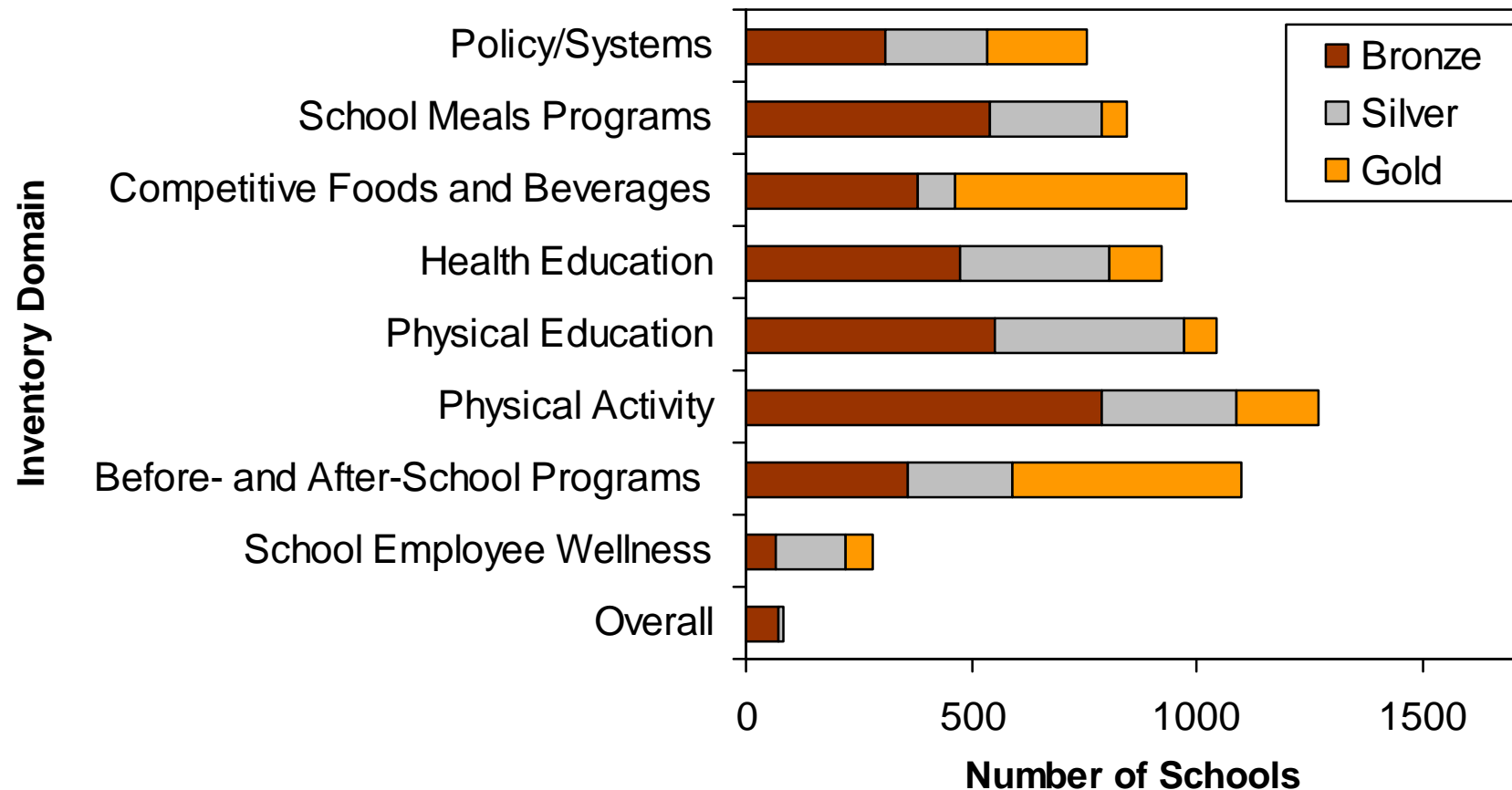
-  BMI among middle school students

Fox MK et al. *JADA* 109(2):S108-S117; Kubik M et al. *AJPH* 93(7): 1168-1173;

# The Data

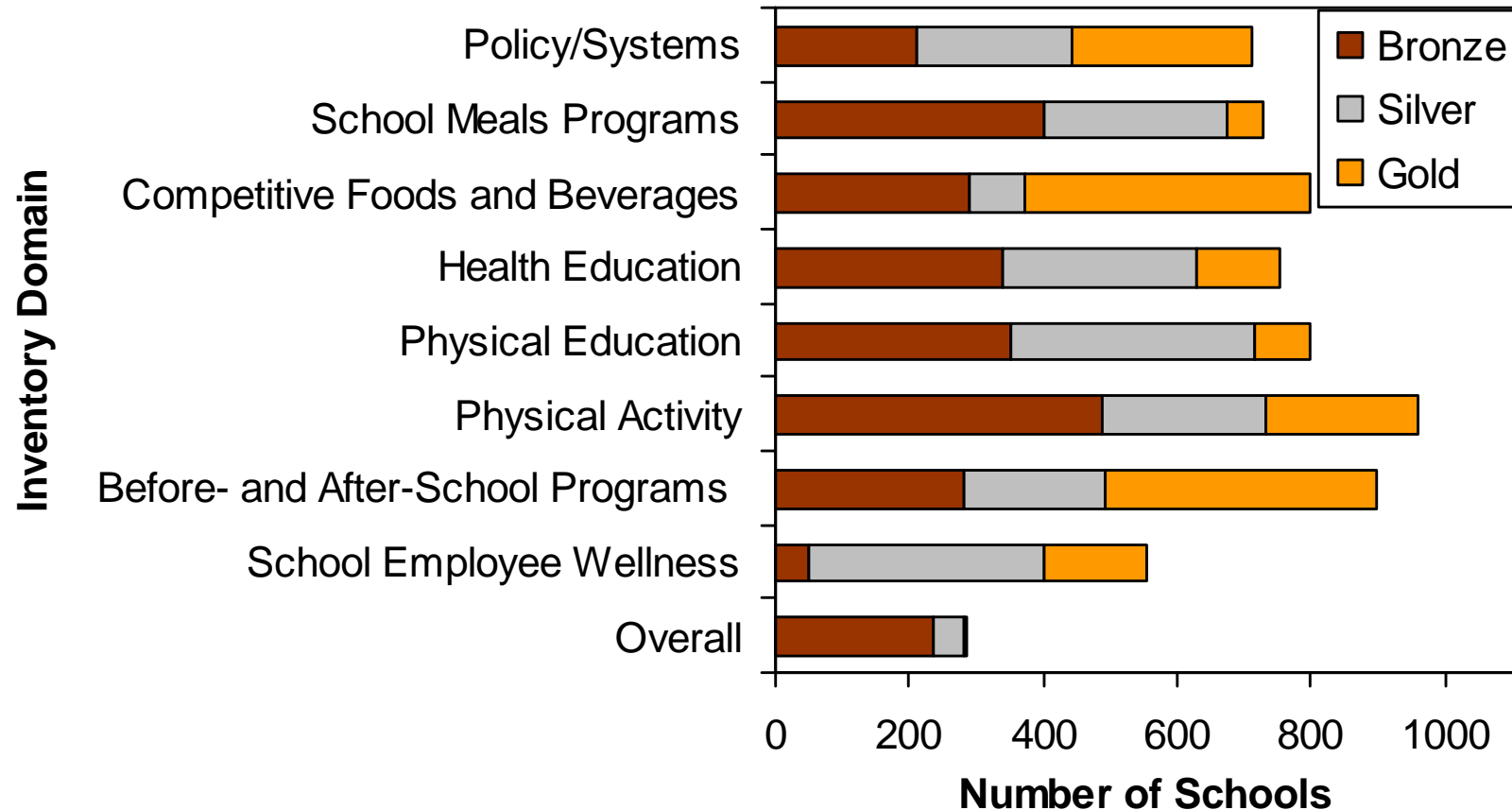


# HSP Inventory Results at Baseline



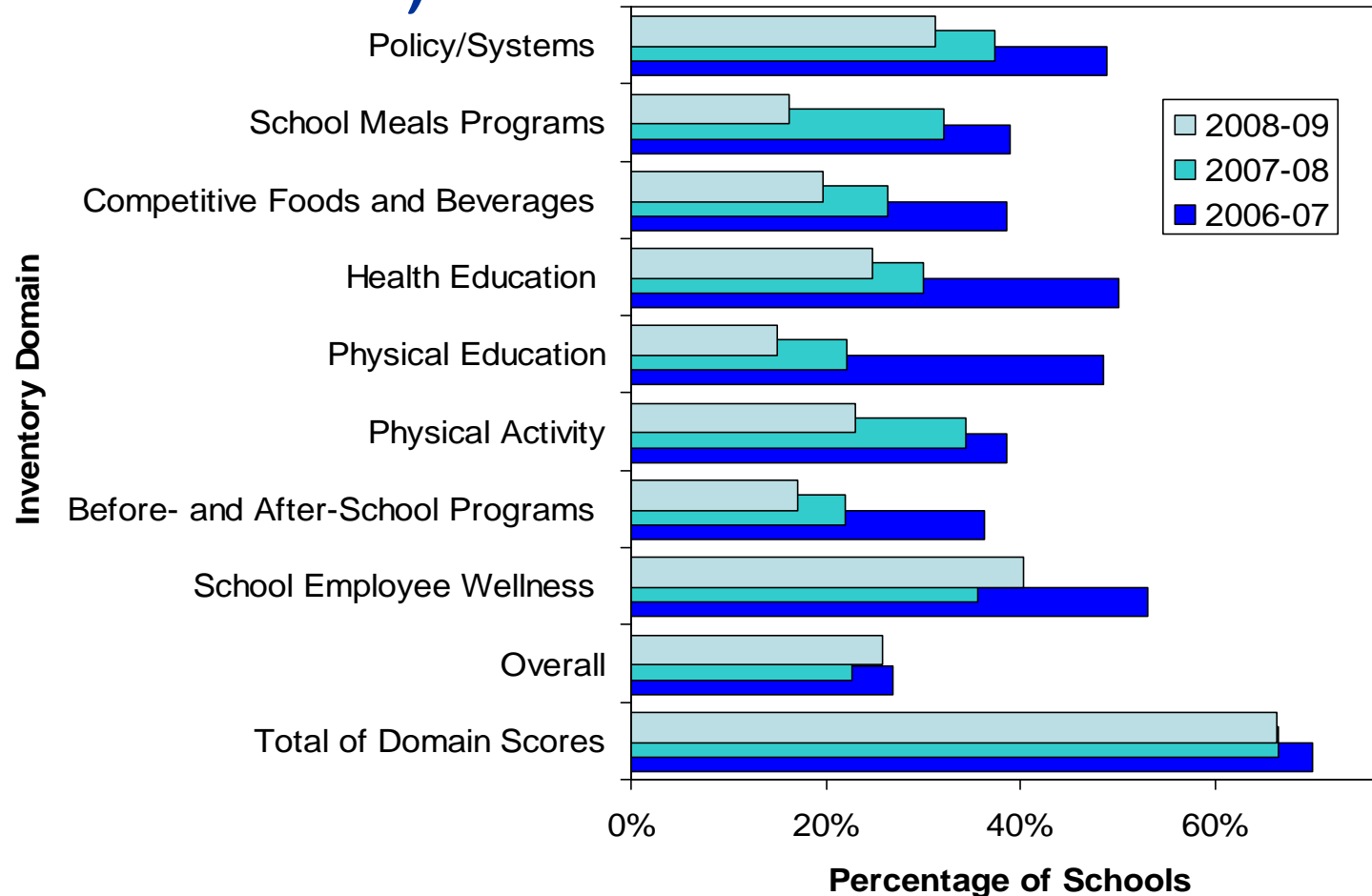
Based on results from 1,726 schools

# Inventory Results at Follow-Up



Based on results from 1,104 schools after 1, 2, or 3 years in program

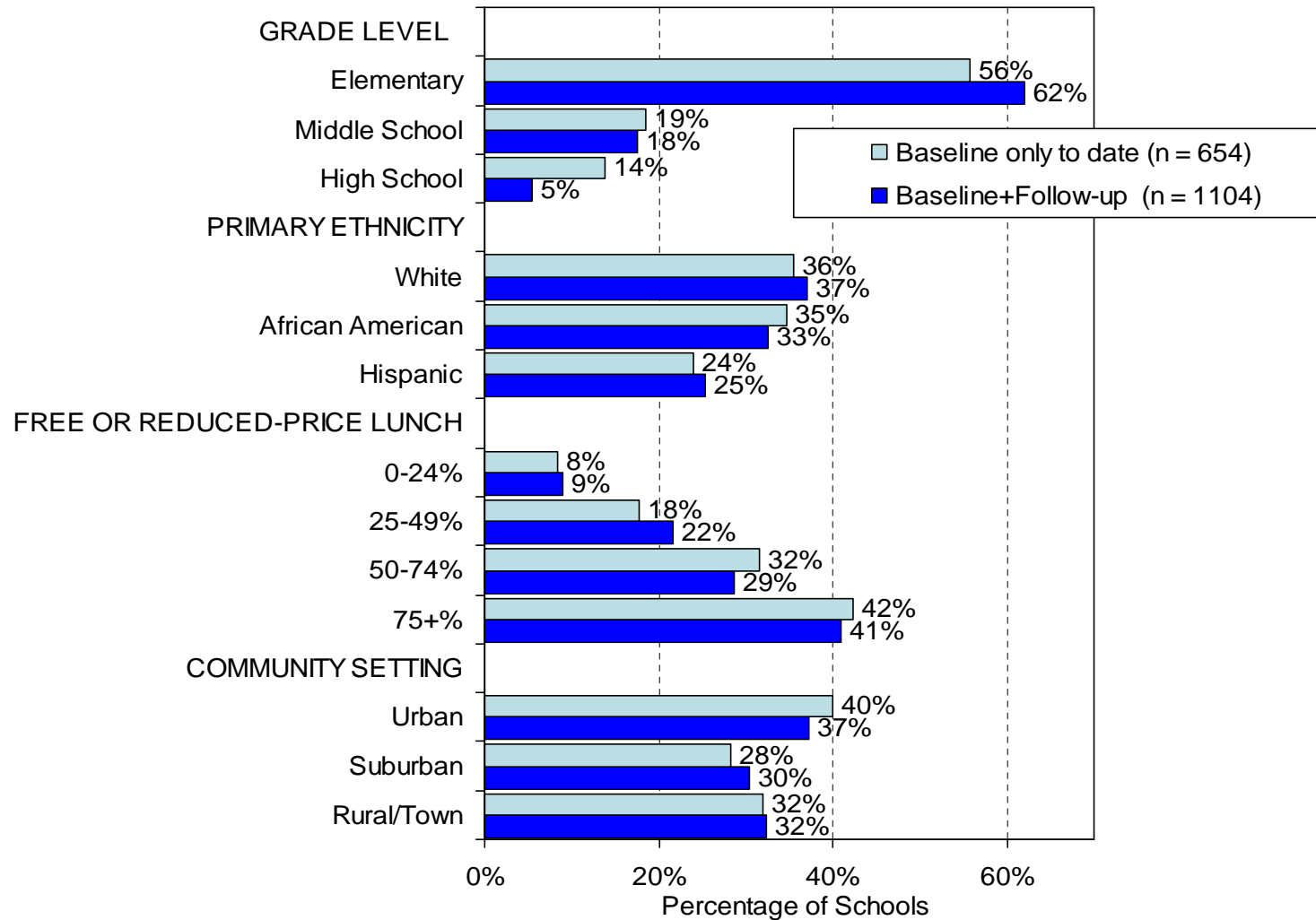
# Schools Reporting Improvement (Domain scores)



Results included for 132 2006-07 schools, 717 2007-08 schools, and 237 2008-09 schools.  
About two thirds improved at least 1 recognition level across the domains.

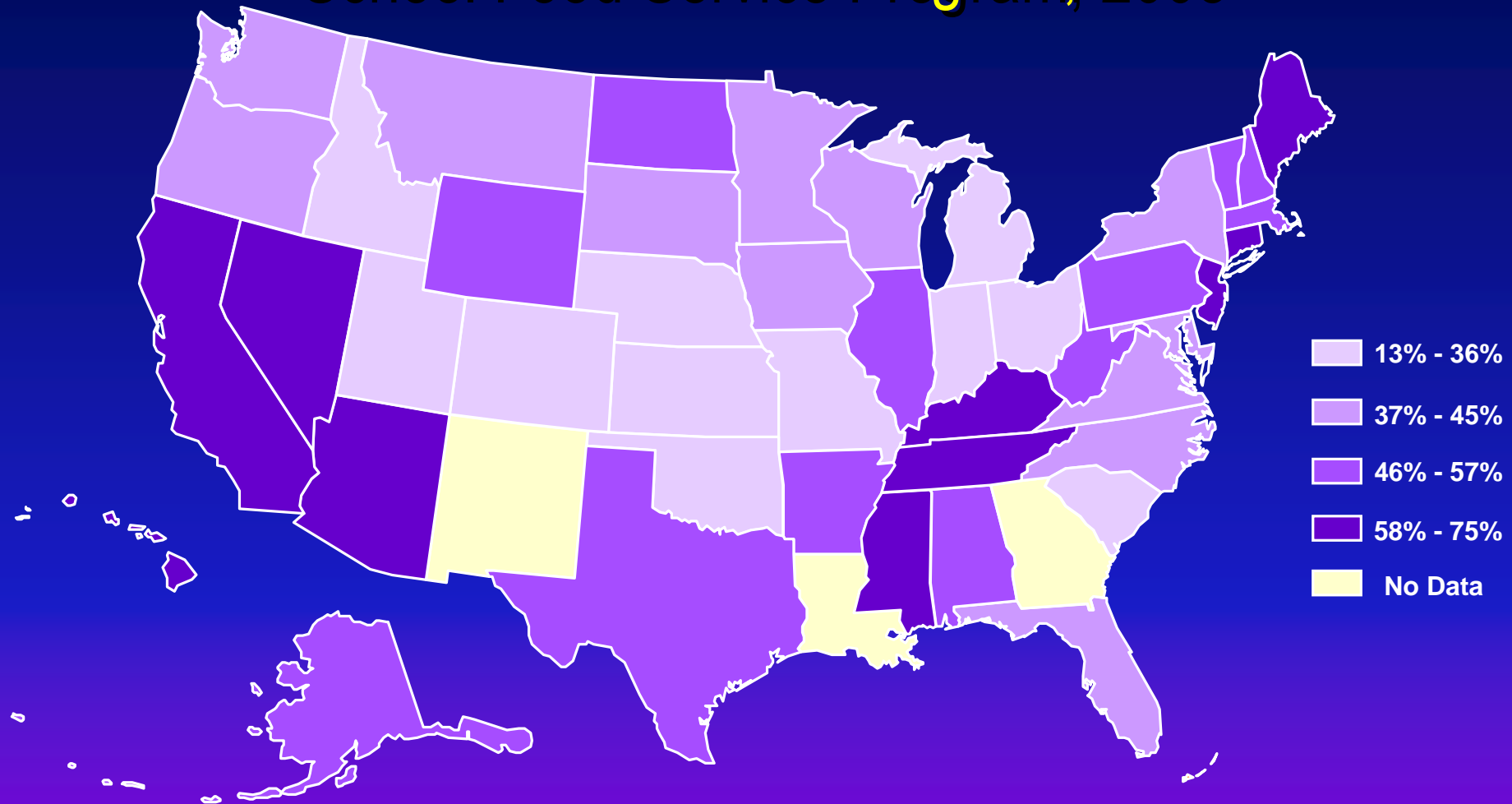


# Characteristics of Two Groups



Source: National Center for Education Statistics Common Core of Data

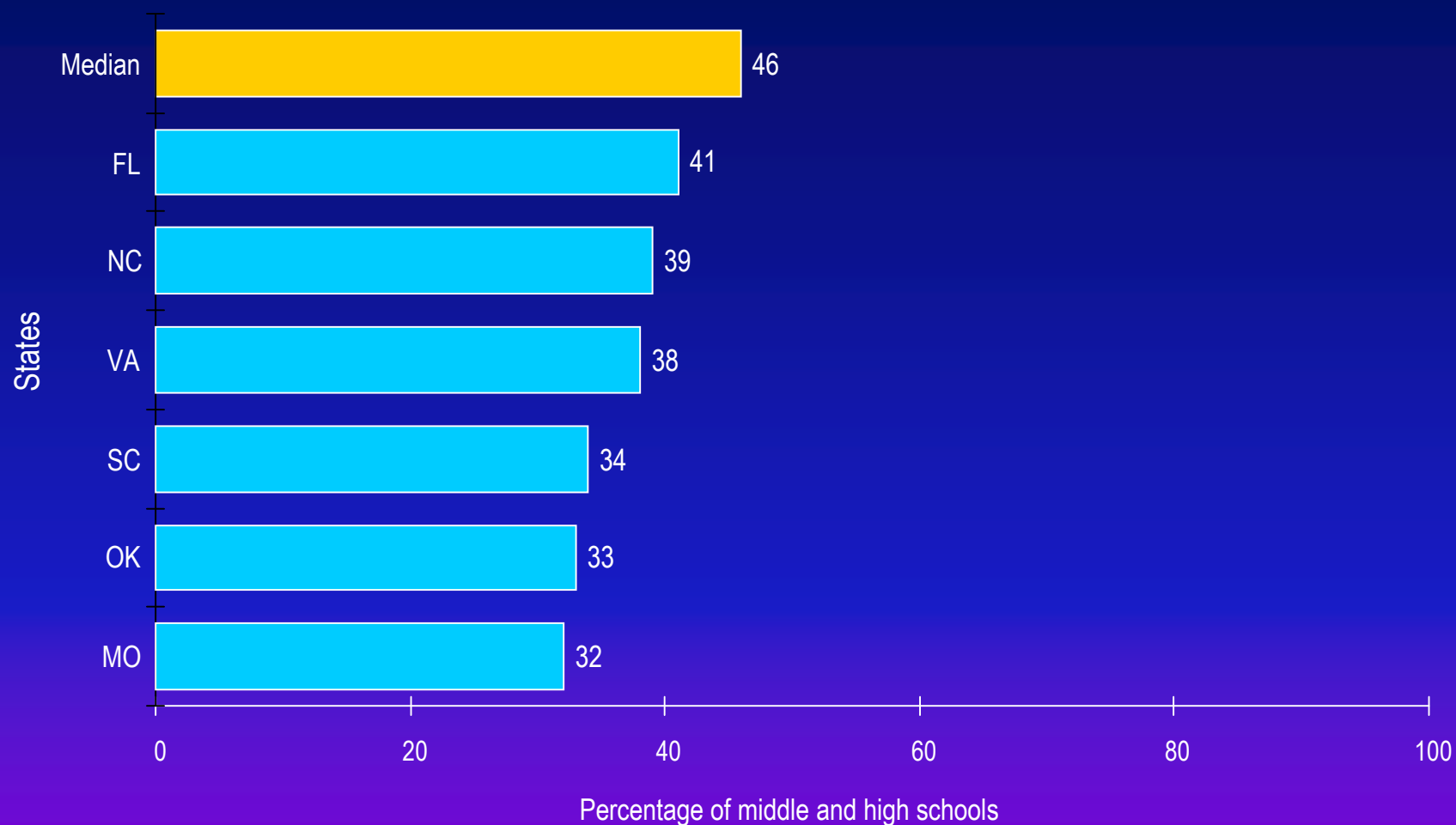
# Percentage of Secondary Schools That Did Not Sell Less Nutritious Foods and Beverages\* Anywhere Outside the School Food Service Program, 2008



\*Baked goods not low in fat, salty snacks not low in fat, chocolate candy, other kinds of candy, and soda pop or fruit drinks that are not 100% juice

School Health Profiles, 2008

# Percentage of Secondary Schools That Did Not Sell Less Nutritious Foods and Beverages\* Outside the School Food Service Program— Selected Southern States and Median Among 47 States, 2008



\*Baked goods and salty snacks not low in fat, chocolate and other kinds of candy, soda pop or fruit drinks that are not 100% juice

CDC, School Health Profiles

# Percentage of Schools in Which Students Could Not Purchase Soda Pop or Fruit Drinks That Are Not 100% Juice—Selected States and Median Among 34 States, 2006 and 2008



CDC, School Health Profiles

2006 2008

SAFER • HEALTHIER • PEOPLE™

# North Carolina Schools are achieving change!



**Congratulations to our Award Winners!!**

## **Halifax County Schools**

- **Scotland Neck Primary School: 07-08 Bronze; 08-09 Silver**
- **McIver Elementary School: 07-08 Bronze**
- **Pittman Elementary School 07-08 Bronze**
- **Hollister Elementary School: 08-09 Bronze**
- **Inborden Elementary School: 08-09 Silver**

## **Franklin County Schools**

- **Long Mill Elementary School: 08-09 Bronze**

## **Warren County Schools**

- **Vaughn Elementary School: 08-09 Bronze**

**(and a HUGE thank you to all the state and local champions who have worked to help schools achieve these standards!!)**

# Examples from the Field



# Overall Healthy Schools Program

## Lessons learned

- Strong state policy does facilitate healthier school environments. (CO, VT, MS, and OR modeled after HSP guidelines)
- Revenue success can be better achieved with students' participation and support- they are the customer base and target audience for healthy foods and beverages.
- Kids love to see their teachers, principal, or cafeteria staff making the same healthy changes they are and building their support is also critical. Modeling also reinforces the behavior and can convince other kids to try it out.
- Comprehensive wellness councils with representation from all stakeholder groups are important for keeping communication open and maximizing support to help overcome obstacles and institute and enforce policies.



# QUESTIONS?

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