

# West Virginia School Programs to Promote Healthy Eating Among Students



Lucas C. Moore<sup>1</sup>, Carole V. Harris<sup>1</sup>, Andrew S. Bradlyn<sup>1</sup>, Melanie Purkey<sup>2</sup>, Don Chapman<sup>2</sup>, Laurie Abildso<sup>1</sup>, Jessica Coffman<sup>1</sup>, Nancy O'Hara Tompkins<sup>3</sup>, Keri Kennedy<sup>4</sup>, & Kristy Blower<sup>4</sup>

# Presentation Outline

- Background Information
- School-based policies and programs to promote healthy eating
- The WV Healthy Lifestyles Act: Legislation and Evaluation
- Study Objective
- Method
- Results
- Conclusion and recommendations

# Background

- WV consistently has one of the highest rates of adult and childhood obesity in the nation (CDC, 2007)
- Prevention efforts during the childhood and adolescent years are important in the prevention adult obesity
- Schools can be optimal settings for obesity prevention programs (Probart et al., 2007; Wechsler et al., 2000)

# Common Environmental Approaches to Promote Healthy Eating in the School Setting

- An environmental intervention is one that affects the availability, access, incentives, or information about foods at the point-of-purchase (Seymour et al. 2004)
  - Menu modifications
  - Restricting unhealthy foods
  - Increasing availability of healthy foods
  - Preferential pricing
  - Point-of-purchase signage and promotion

<b>Environmental Intervention</b>	<b>Example</b>
Menu modifications	■ Modifying the nutritional content of school meals (Osganian et al. 1996; Story et al. 2003)
Restricting the availability of unhealthy foods	■ Limiting the availability of chips, candy, sweetened beverages; Removal of vending machines (Cullen et al. 2006; Cullen et al. 2007)
Increasing the availability of healthy foods	■ Increasing the availability of low-fat foods (French et al. 2004)
Price reductions for healthy foods	■ Reducing the price of fruits and vegetables (French et al. 1997; French et al. 2001)
Point-of-purchase signage	■ Providing point-of-purchase signage about the nutritional content of food items available (Conklin et al. 2005; Whitaker et al. 2000)

# The WV Healthy Lifestyle Act

- To combat the childhood obesity epidemic, the WV Legislature passed the Healthy Lifestyles Act in April of 2005
  
- The school-based components of the Healthy Lifestyles Act include:
  - 1) Time requirements for physical education class
  - 2) Guideline for vended beverages
  - 3) Fitness assessment
  - 4) Health education requirements, and
  - 5) BMI measurement

# Evaluation of the WV Healthy Lifestyles Act

- The first annual evaluation of the Healthy Lifestyles Act took place in 2007
- This evaluation was conducted by a team from West Virginia University's Health Sciences Center with support from the Robert Wood Johnson Foundation<sup>®</sup>
- Partners for this evaluation were:
  - WV Bureau for Public Health Office of Healthy Lifestyles (OHL)
  - WV Department of Education Office of Healthy Schools (OHS)
- Project Partners
  - WV Prevention Research Center (PRC)
  - Coronary Artery Risk Detection in Appalachian Communities (CARDIAC) Project

# Evaluation Methodologies

- As part of the evaluation of the WV Healthy Lifestyles Act, the following school personnel were surveyed:

Respondent	Response Rate
Superintendents	95%
Principals	84%
PE Teachers	57%
School Nurses	89%

# Evaluation Methodologies

- In addition to school personnel we surveyed/interviewed:
- 124 health care providers
- 1500 parents
- 420 students

# Study Objective

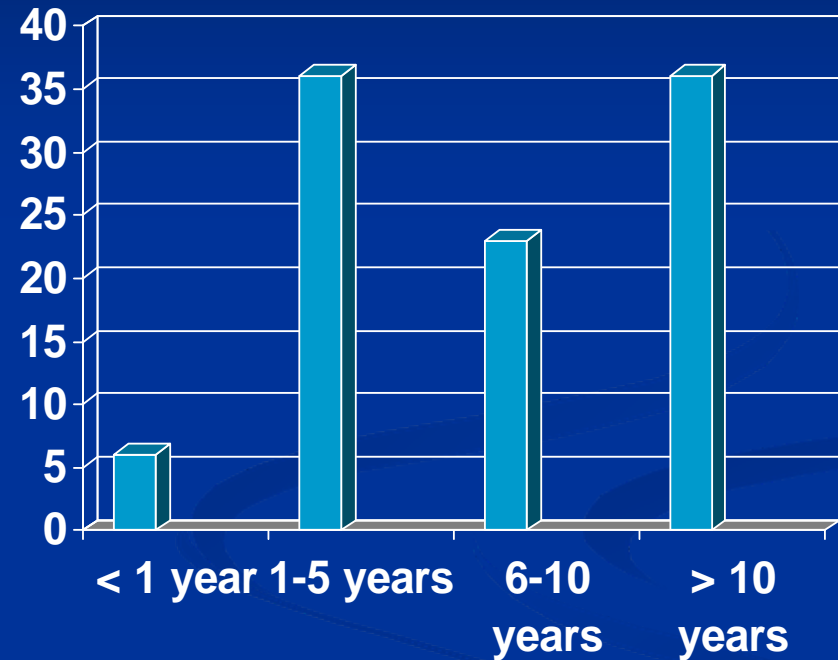
- The objective of the present study was to explore the nutrition policies and programs that West Virginia Schools have implemented to combat childhood obesity and encourage appropriate nutrition among their students.
- Of particular interest were these schools' use of environment approaches to encourage healthy eating.

# Method

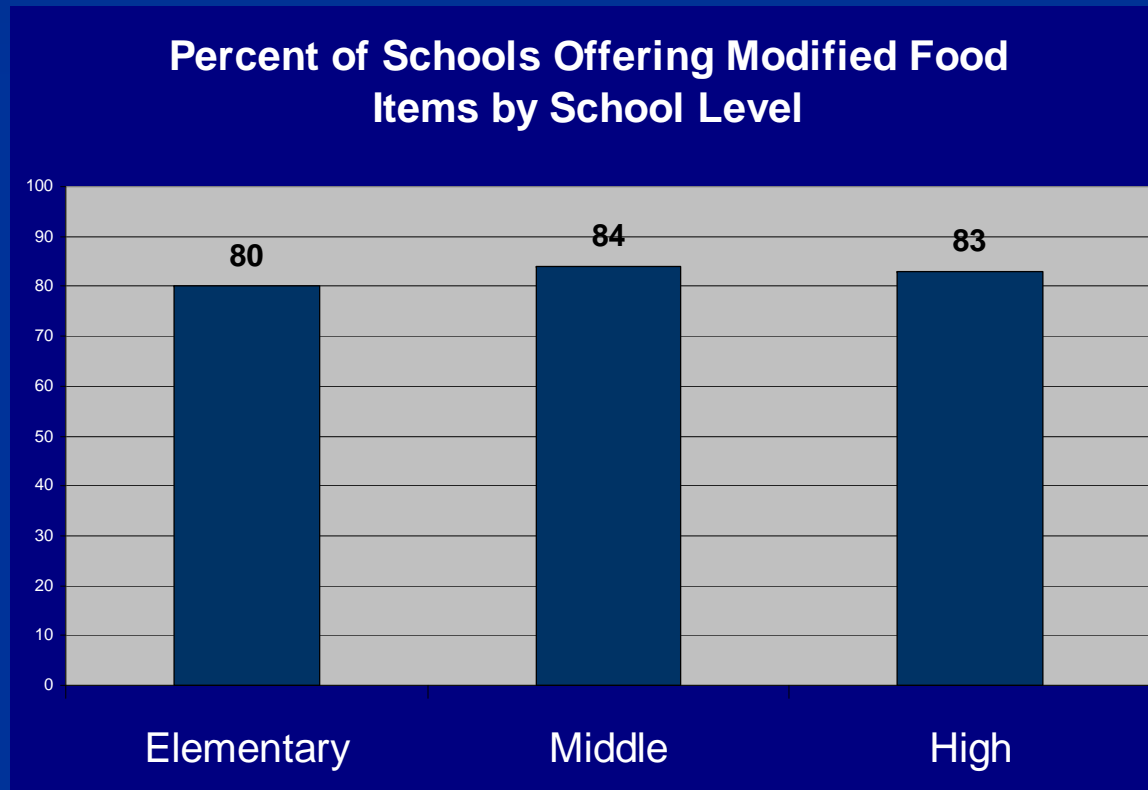
- The present study surveyed principals in conjunction with a state-wide evaluation of The WV Healthy Lifestyles Act (Health Research Center, 2009)
- All traditional public schools in WV (N = 696) were surveyed
- A combination of mail and electronic survey methodologies were used
- A response rate of 84% was achieved (n = 586)
- The total sample was comprised of:
  - Elementary (67%)
  - Middle (18%)
  - High (15%)

# Results

- Mean Age: 50
- Gender
  - 54% Male
  - 46% Female
- Education
  - 97% Masters Degree
  - 3% Doctoral Degree
- Experience
  - 6% Less than 1 year
  - 36% 1-5 years
  - 23% 6-10 years
  - 36% Greater than 10 years



# Menu Modifications



# Access

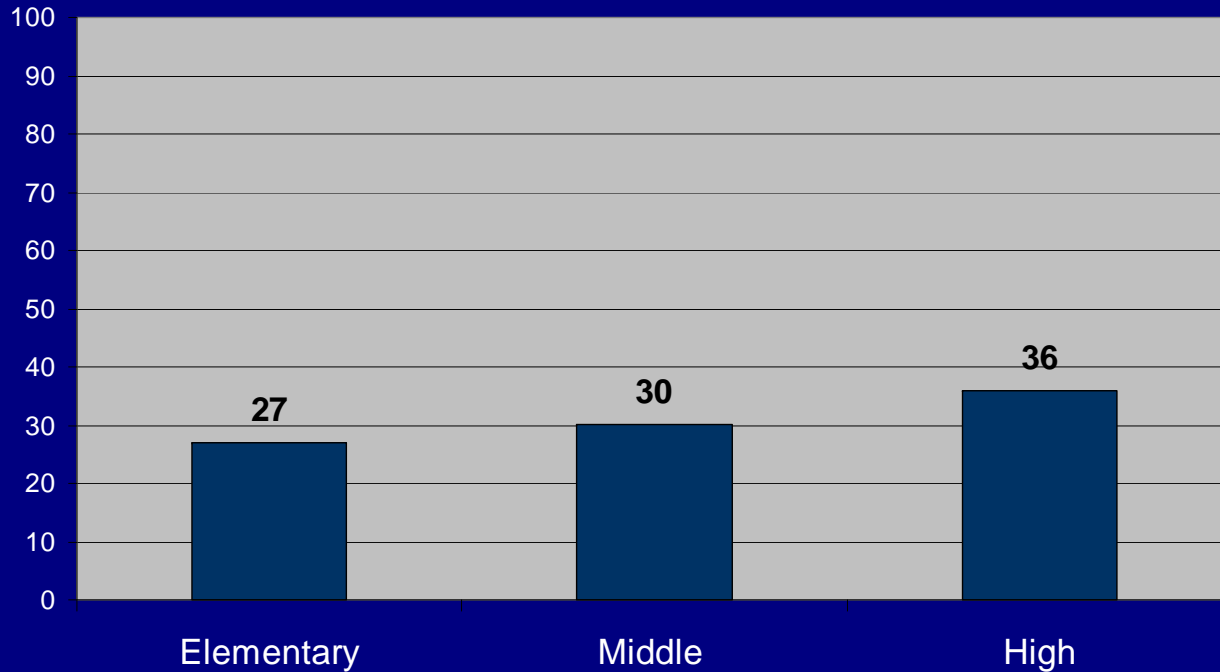
	Have a Policy
School Assemblies	56%
Field Day	55%
Holiday parties	65%
Classroom parties	64%
Birthdays	55%
Reward activities	57%

## Have a Policy

	Elementary	Middle	High	Significance
School Assemblies	59%	55%	41%	E>H
Field Day	60%	53%	38%	E>H, M>H
Holiday Parties	75%	54%	33%	E>M, E>H, M>H
Classroom Parties	73%	59%	31%	E>M, E>H, M>H
Birthdays	62%	50%	29%	E>M, E>H, M>H
Reward Activities	63%	57%	29%	E>H, M>H

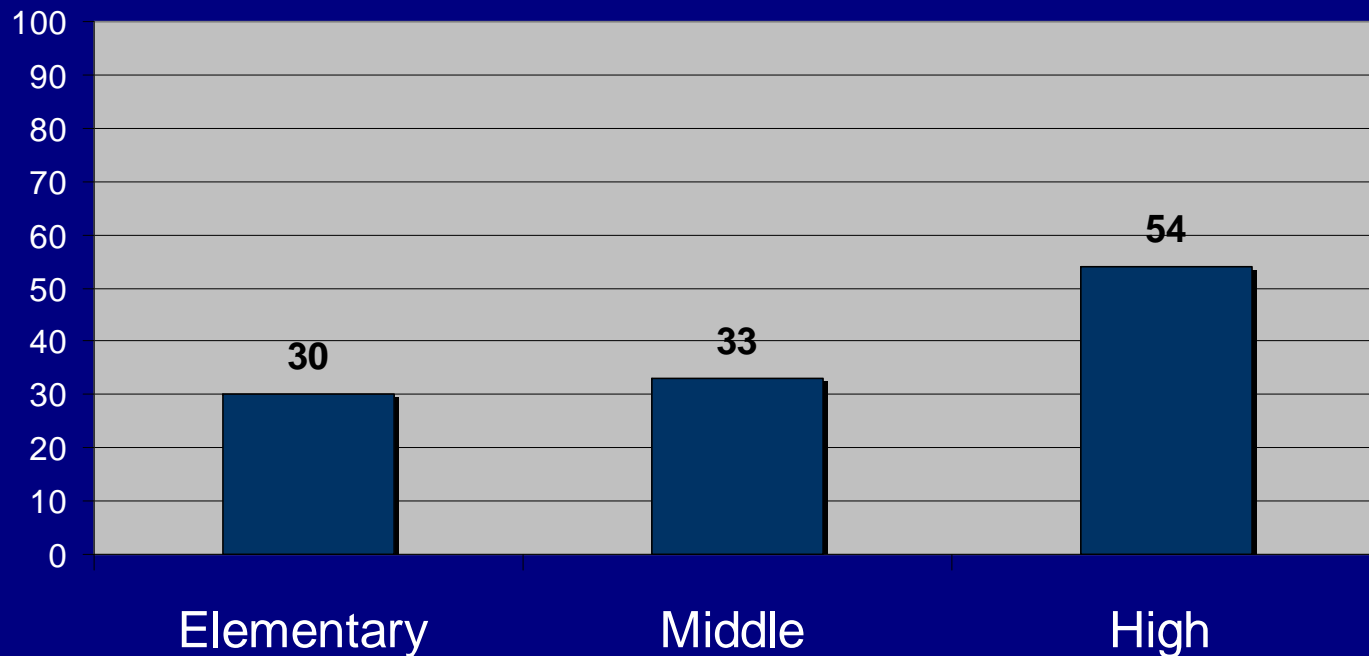
# Point-of-Sale Signage

Percent of School that Provide Point-of-Sale Signage for Food Items Available to Purchase



# Significant Changes to the Foods and Beverages

Percent of Principals Who Report Significant Changes to the Foods and Beverages Offered at Their Schools ( $p < .01$ )



# What Changes Have Been Made

## Changes in ...

- The foods and beverages offered in the cafeteria
- The availability of soda
- The availability of vending machines (e.g., when they can be turned on)
- The availability of water
- School party requirements/snacks
- The foods offered at concession stands
- Portion sizes
- Policies regarding the use of food as a reward

# What Prompted These Changes

- Complying with the Healthy Lifestyle Act
- Health concerns
- Health promotion

# Conclusions

- Many schools, as illustrated in this study, went beyond the mandates set forth by the West Virginia Legislature to implement environmental nutrition policies
- These changes provide additional opportunities for schools to model and reinforce healthful eating among students, and contribute to the state's efforts to address childhood obesity
- The Standards for School Nutrition (2008)
- While policies such as these are positive, it is not known how they will impact the state's obesity problem
- Further research is needed to explore the relationship between environmental nutrition policies and childhood obesity

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