

# Health and Student Achievement - the Link

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# Schools: Mission Education

**1 in 5 don't graduate on time**

1 in 4 Latinos

1 in 3 Black students

Why Not?





# One Reason: Health Related Barriers

Physical Inactivity  
Obesity & Poor Nutrition  
Asthma  
Social and Emotional Stress  
Poor Vision  
Tooth problems  
Teen pregnancy





# What is the Connection to Performance?

## **5 Causal Pathways:**

Sensory Perceptions

Cognition

Connectedness and Engagement with School

Absenteeism

Dropping out







# Childhood Obesity When did it Start?

1970s 1980s

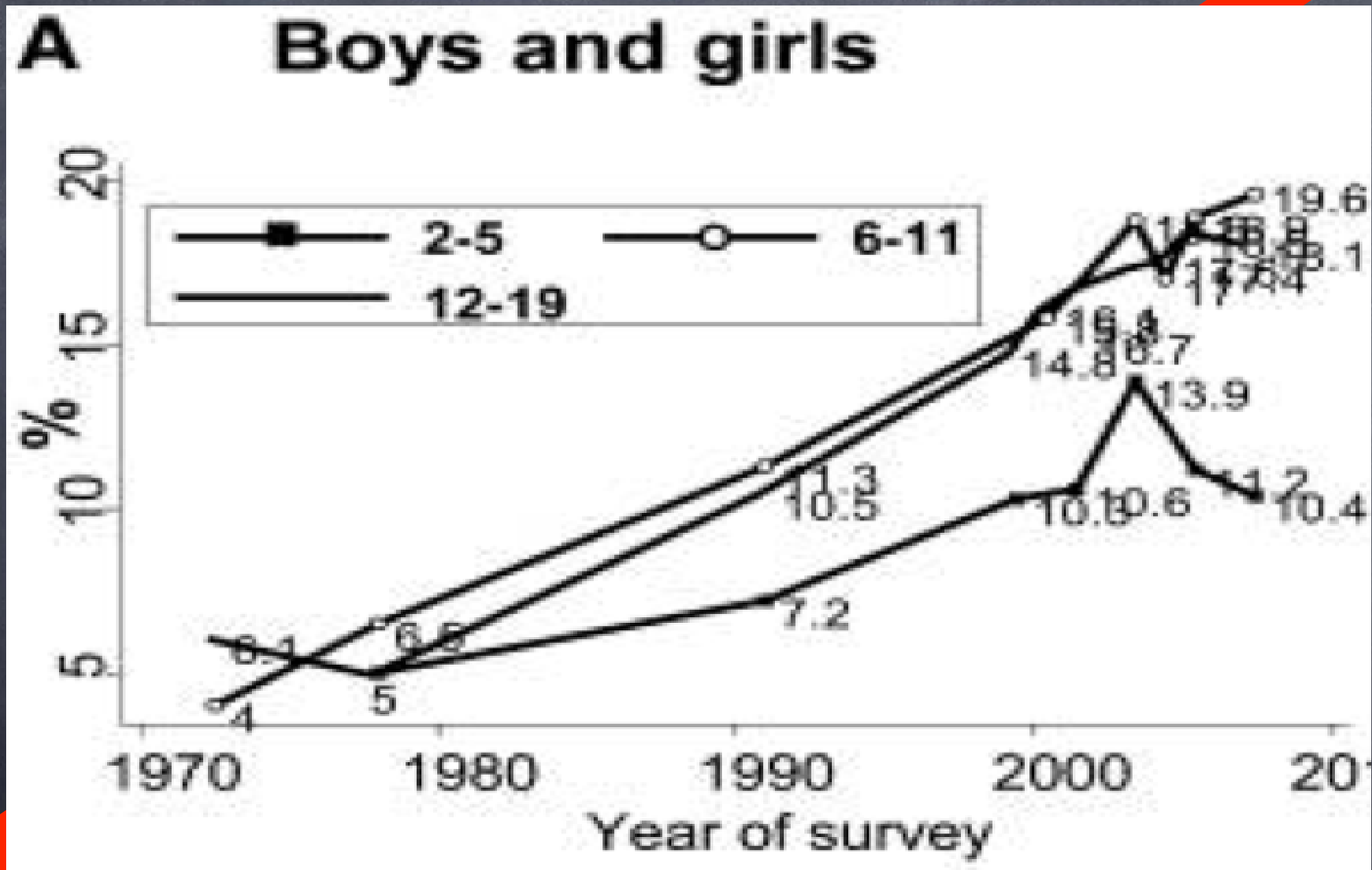
Source: Von Hippel 2013. Fels Longitudinal study Dayton.  
Ohio



# 1970-2010

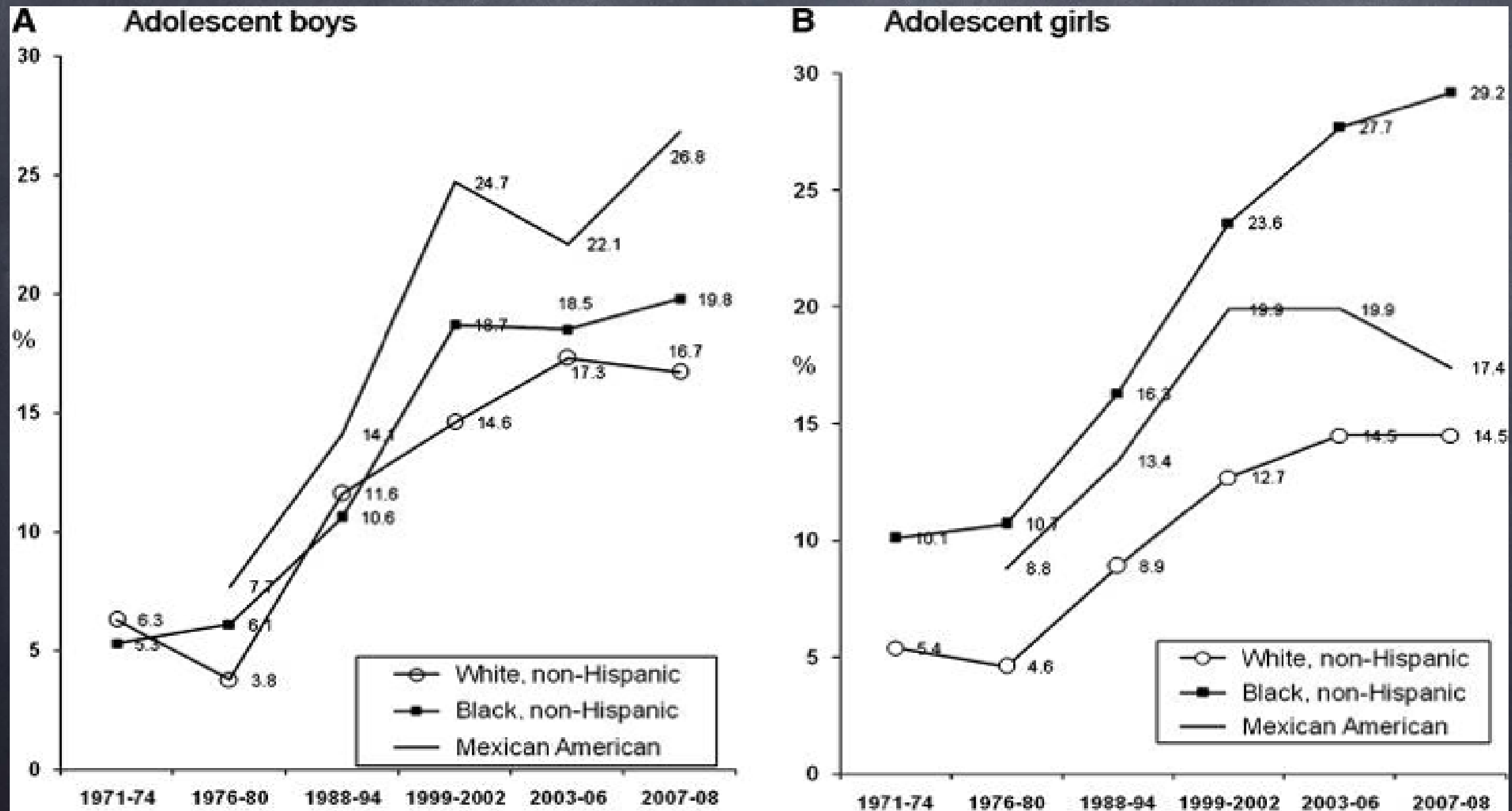
## Up Up and Away

Childhood Obesity Prevalence in US (Source Wang Y 2011)





# Whites; Blacks; Mexican Americans

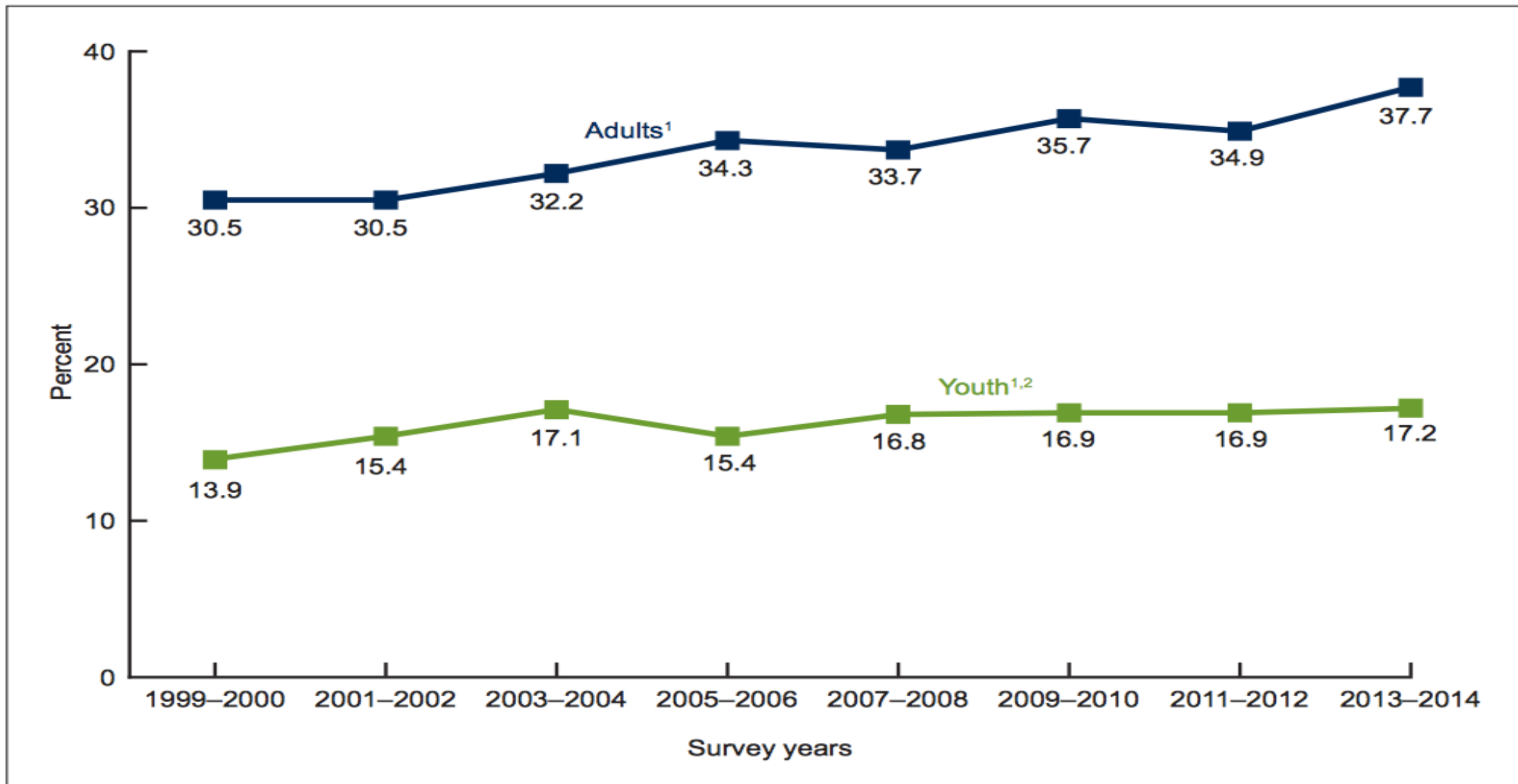


US Childhood Obesity Prevalence by  
Race/Ethnicity 1970-2010 Wang Y 2011



# Are we winning the obesity fight? Not yet

Figure 5. Trends in obesity prevalence among adults aged 20 and over (age-adjusted) and youth aged 2–19 years: United States, 1999–2000 through 2013–2014



<sup>1</sup>Significant increasing linear trend from 1999–2000 through 2013–2014.

<sup>2</sup>Test for linear trend for 2003–2004 through 2013–2014 not significant ( $p > 0.05$ ).

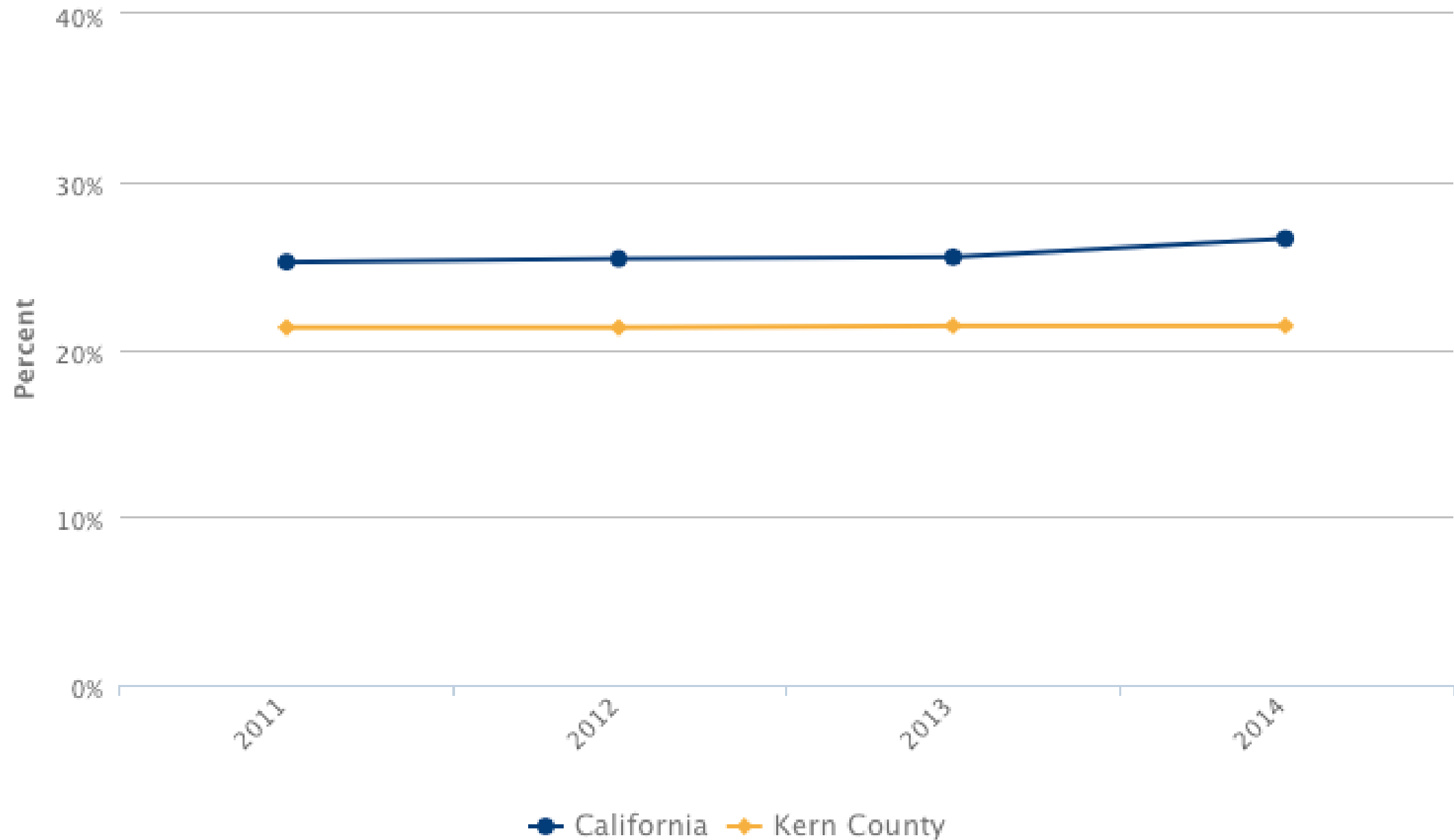
NOTE: All adult estimates are age-adjusted by the direct method to the 2000 U.S. census population using the age groups 20–39, 40–59, and 60 and over.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey.





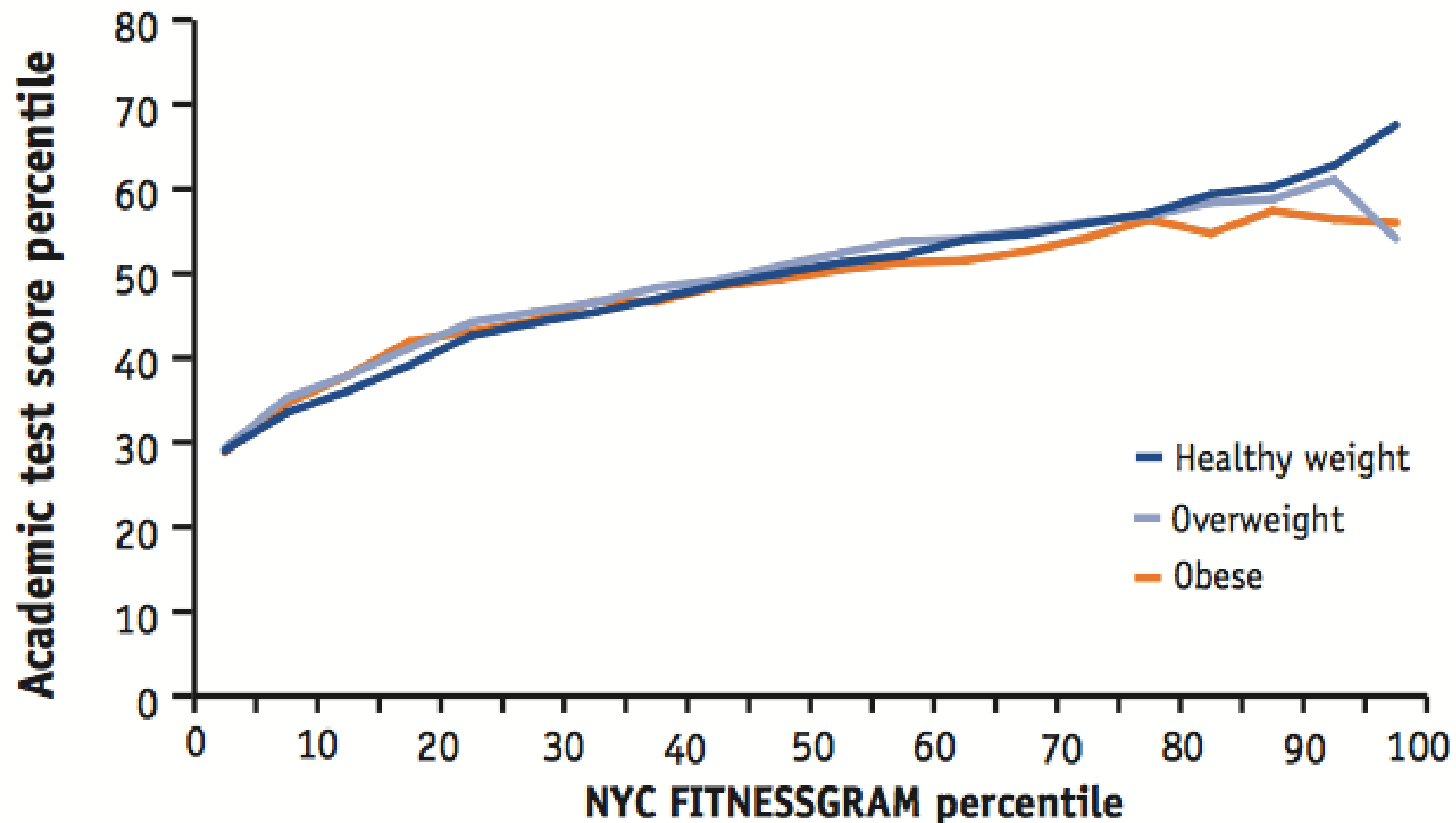
# Kids meeting all physical fitness standards Kern County & CA



Source: [kidsdata.org](http://kidsdata.org)

# Physical Fitness & Test Scores 600,000 NYC Kids

**Academic test and NYC FITNESSGRAM scores, by weight status**



Source: NYC Vital Signs 2009

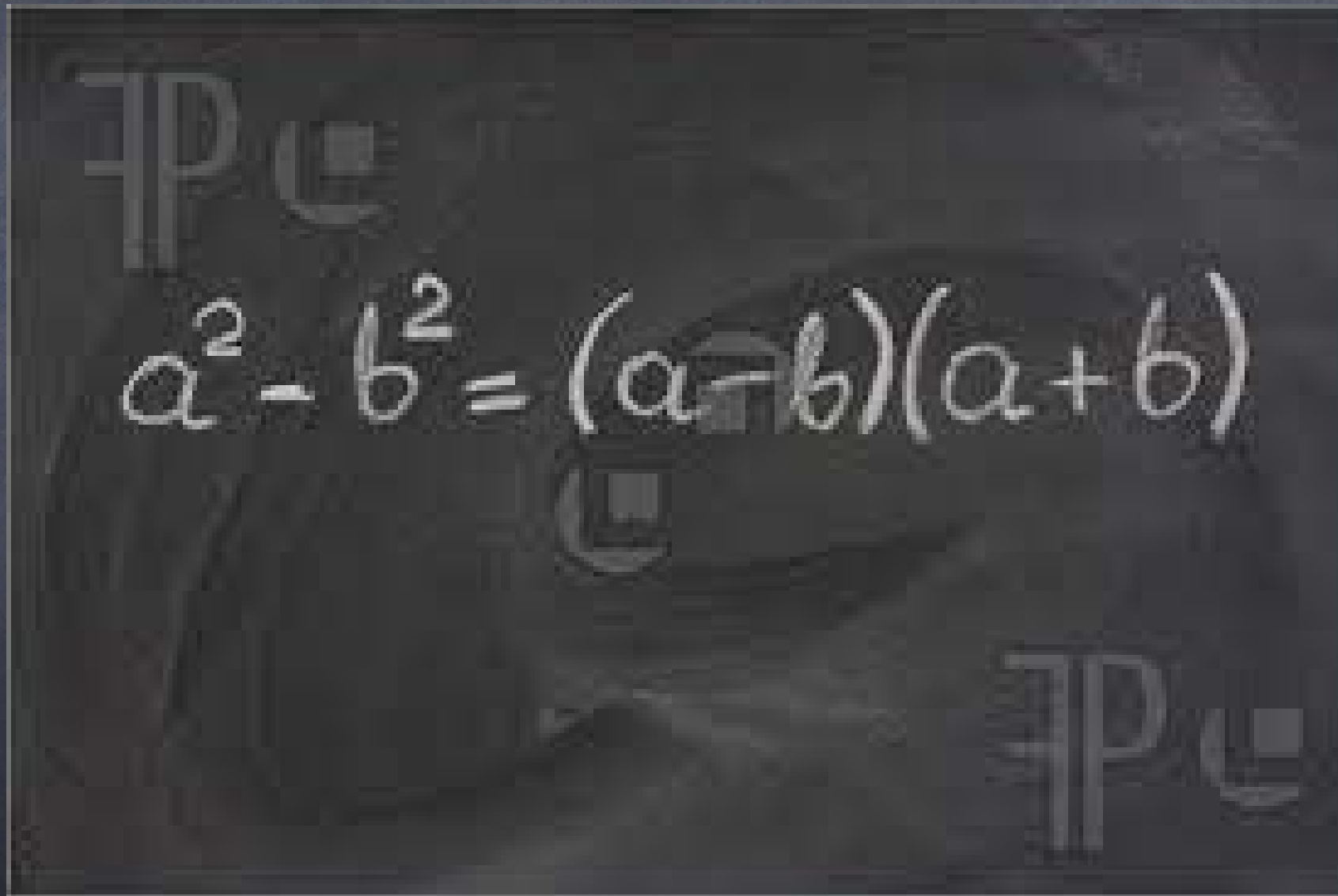


# Physical Activity:

Better Test Scores

Better Math Scores

Better Concentration and Attention



# More PE

Better grades, better behavior, better scores  
5-10 minute classroom PA Breaks:  
Improved performance, behavior,  
math and reading scores







# Eating Breakfast

Associated with better cognitive performance, better grades and scores and less absenteeism

(But beware—make it available but don't over-push to where kids eat multiple breakfasts)







# Need to Dump These Sugar-laden Guys Too!







WUFFORD

00

0000

TIGERS

00

TIMEOUTS  
LEFT

3

DOWN

1

TO GO

10

BALL ON

35

QTR

1

TIMEOUTS  
LEFT

3

PAPA JOHN'S

TENLEY  
HIGH SCHOOL





Water bottle filler  
in Lamont Park,  
Kern County.  
Agua4All

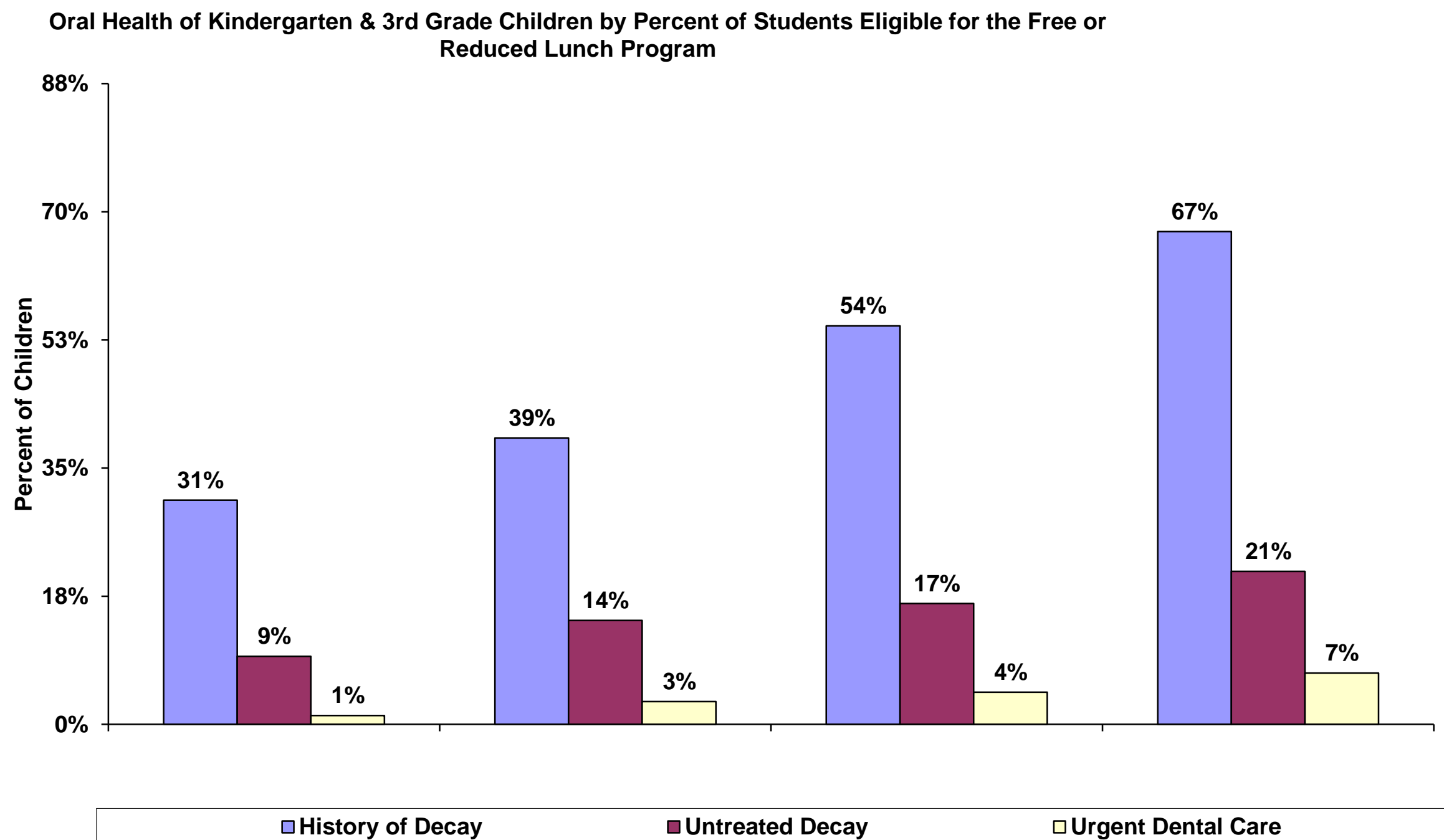




Teeth—a BIG Cause of Absenteeism

# Unfair Toothaches

## Oral Health of Kindergarten & 3<sup>rd</sup> Grade Children by Percent of Students Eligible for the Free or Reduced Lunch Program: Sonoma County





# What About Health Education?



# Asthma











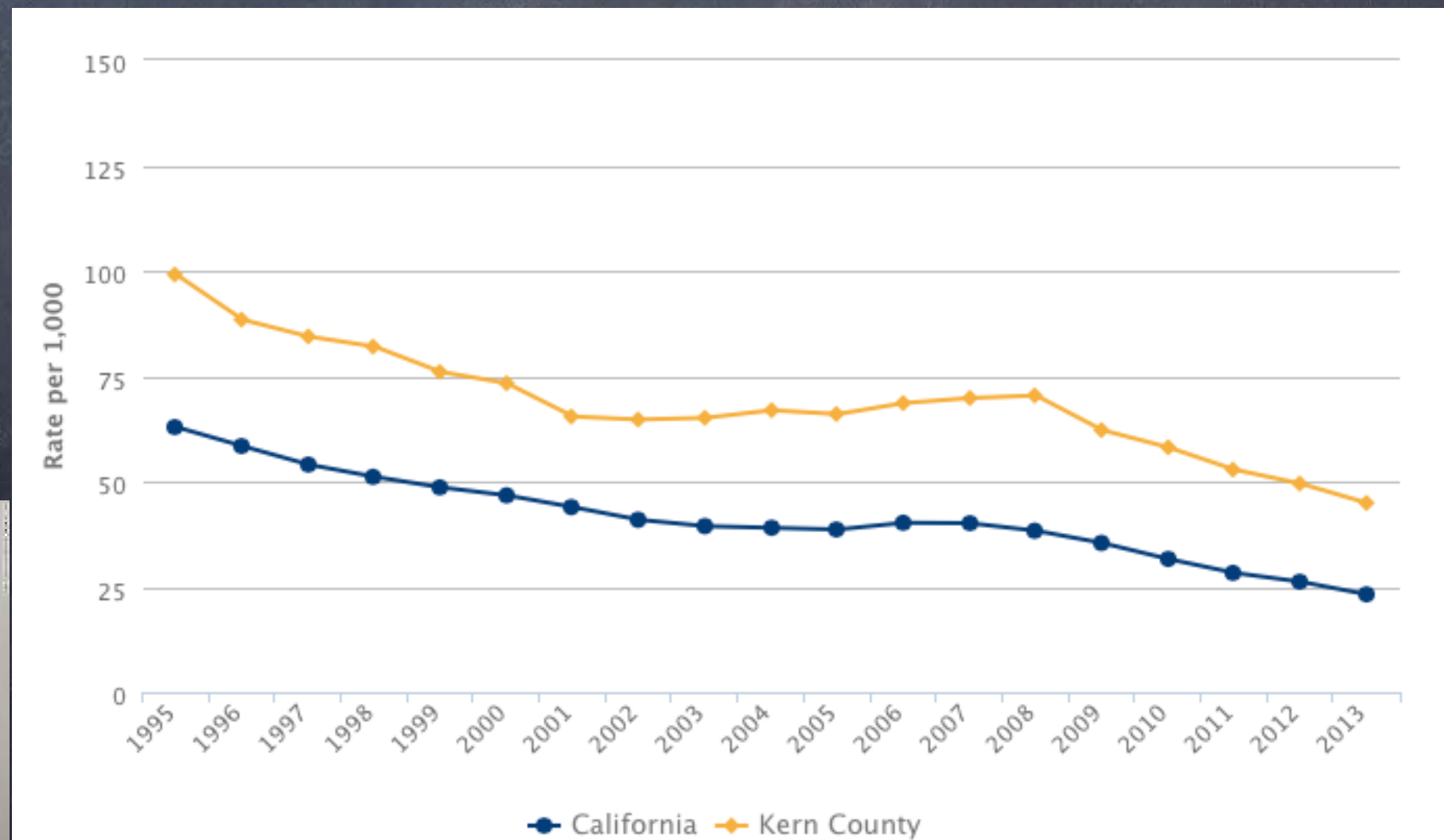
# Mental health & counseling



44% of California Women had Sexual Initiation  
Before age 18

Kern is a Leader in Teen Pregnancy

Teen Pregnancy  
Rates Kern and  
California



# Healthy Teachers and Staff

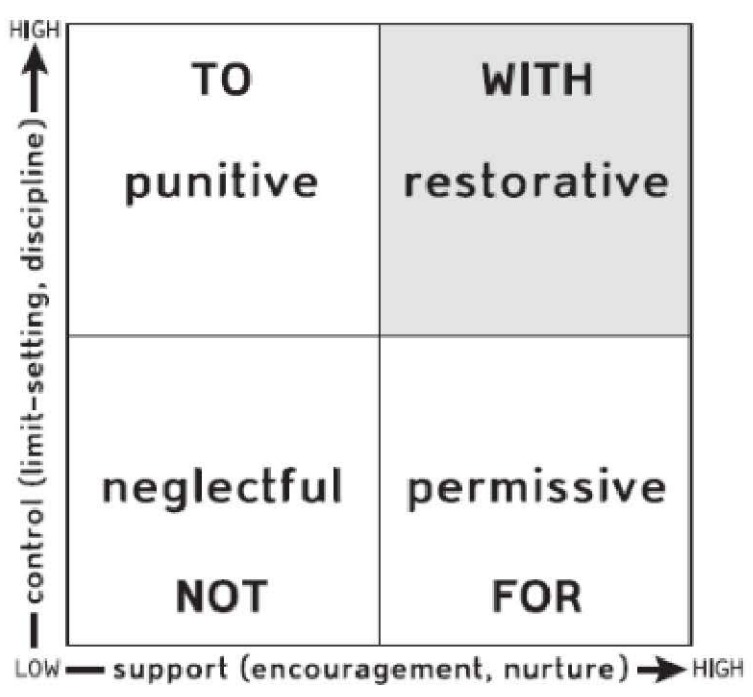




# Assuring a Safe Environment

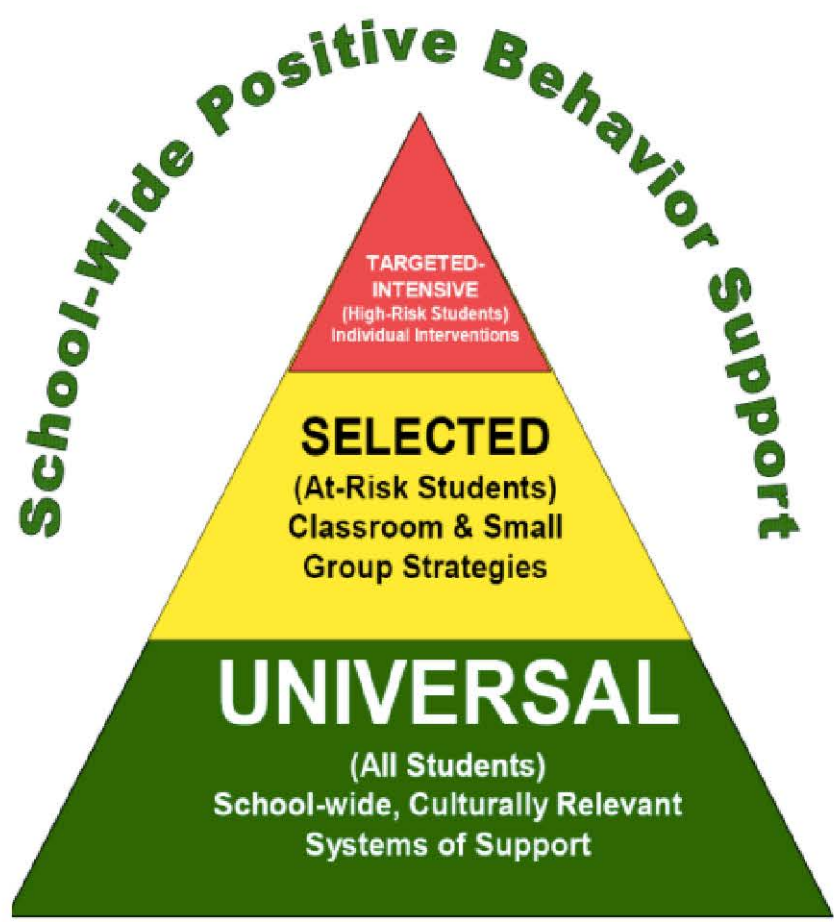






**Social Discipline Window**  
(From the International Institute for Restorative Practices – [www.iirp.org](http://www.iirp.org))

Restorative practices are about schools doing things *with* students, rather than *to* them or *for* them.



**Three Tiered Approach to PBI**  
From the Los Angeles Unified School District  
<http://Disciplinepolicy.lausd.net>

# Restorative Justice & PBI S



Circle process with Mrs. Thomas at Cole Middle School in Oakland, CA. Photo by Julie Mallozzi



# School Connectedness



The belief by students that adults and peers in the school care about their learning and about them as individuals



# School Physical Environment





# Engaged Parents





community

involvement

# The Whole School, Whole Community, Whole Child Approach



# Whole School, Whole Community, Whole Child

Table 1. Whole School, Whole Community, and Whole Child (WSCC) Components by Category

WSCC Components	Categories
<ul style="list-style-type: none"><li>Physical education and physical activity</li><li>Nutrition environment and services</li><li>Health education</li></ul>	Supporting healthy student behaviors
<ul style="list-style-type: none"><li>Health services</li><li>Counseling, psychological, and social services</li><li>Employee wellness</li></ul>	Supporting school health services
<ul style="list-style-type: none"><li>Social and emotional school climate</li><li>Physical environment</li></ul>	Supporting safe and positive school environments
<ul style="list-style-type: none"><li>Family engagement</li><li>Community involvement</li></ul>	Supporting the engagement of family and community

connectedness  
absenteeism



# Opportunities

Local Control funding in CA/LCAPs  
District and school wellness policy process  
Wellness committee & School health Advisory groups  
SNAP's Nutrition Ed & Obesity Prevention \$  
CA Active Transportation Program \$  
Mental Health Services Act S  
School-based health center funding  
MediCal for oral health, reproductive health  
Hospital community benefits  
Federal fresh fruit and vegetable program  
Agua4All  
and more .....



# Some low-cost Moves

Get bad food & drink and advertising OUT (free!)

Brief PA breaks in the classroom

Positive discipline

Increase water access (has initial cost but lasts decades)

Parent & community engagement



PRISON  
\$62,300

health happens here  
SCHOOL  
\$9,100

#DoTheMath  
www.facebook.com/safeandjust



# Thank You

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Much of the material here is summarized in Medical, et al  
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