

Taking on childhood obesity in Chicago



# Healthy Teacher Network

## Kick-off Workshop

Douglas Park Cultural Center  
November 10, 2009

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# Linking Schools and Obesity Prevention

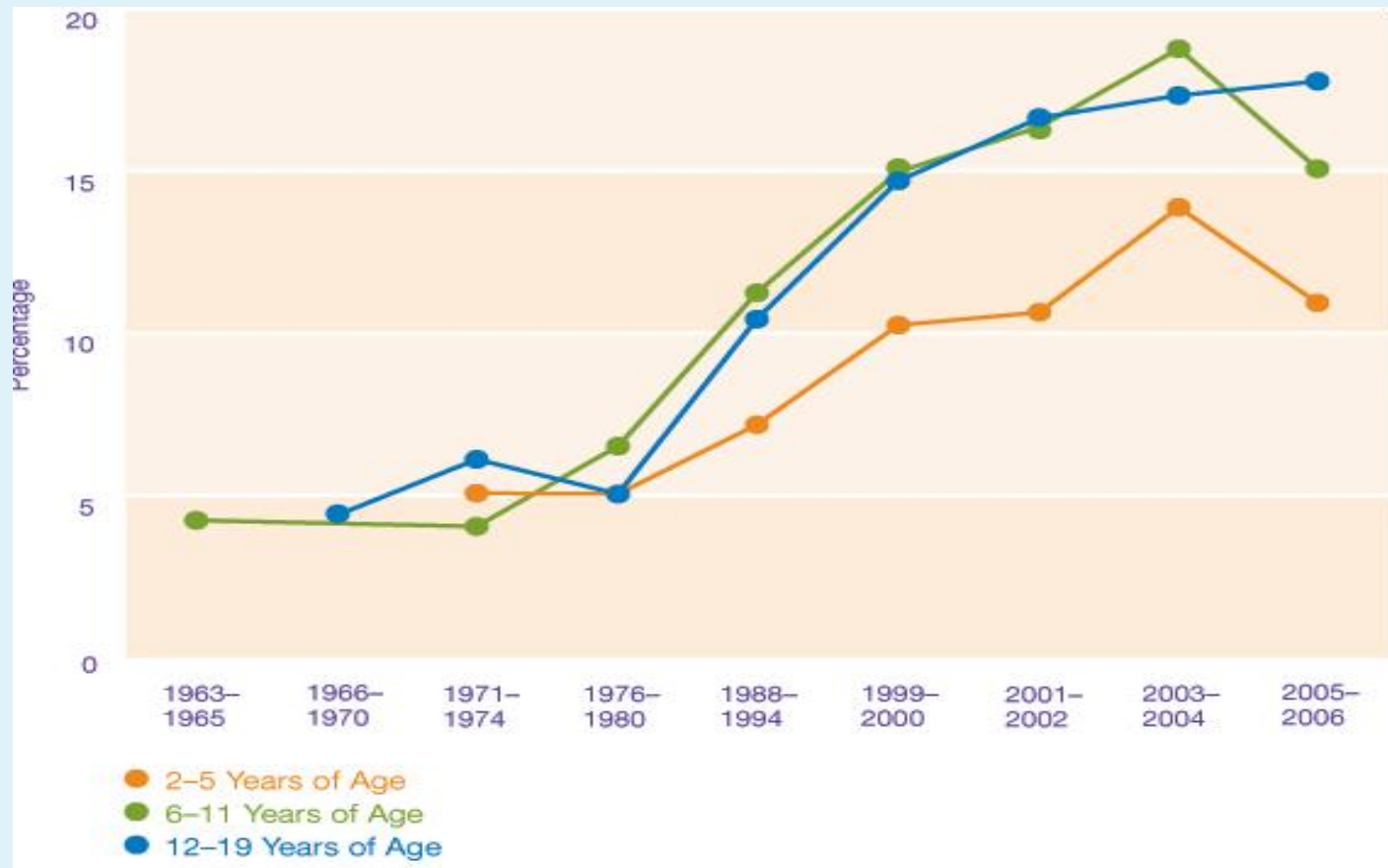
Adam Becker, PhD, MPH  
Executive Director, Consortium to Lower  
Obesity in Chicago Children (CLOCC)

November 10, 2009

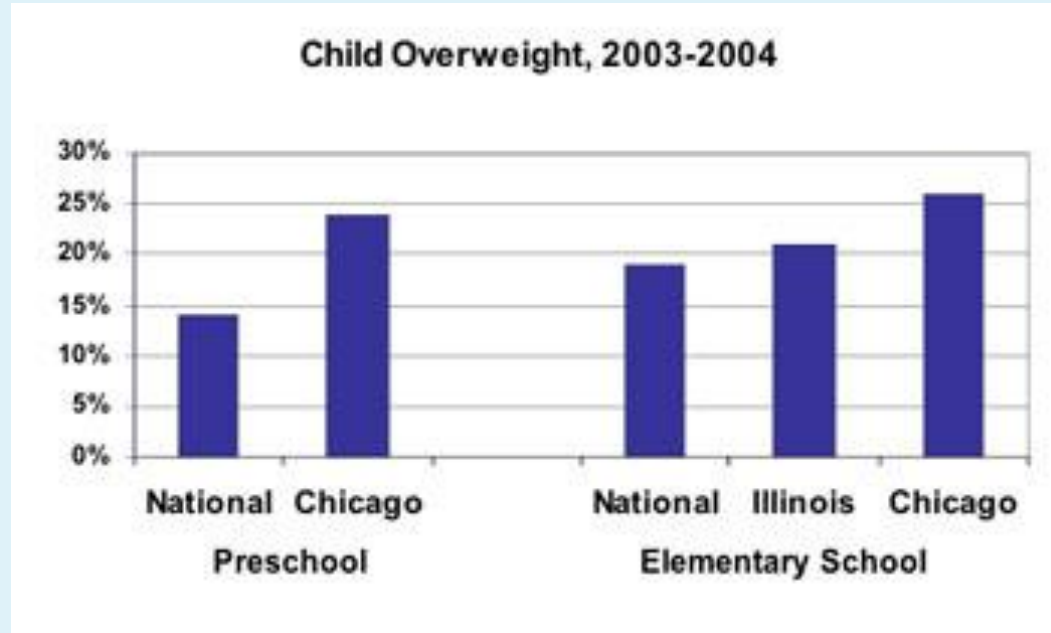
# Discussion Goals

1. Review background to childhood overweight.
2. Learn how healthy eating and physical activity impact student health and academic performance.
3. Learn about the Consortium to Lower Obesity in Chicago Children (CLOCC) and School Systems Working Group.
4. Learn how schools can address childhood obesity.

# National Trends in Childhood Obesity

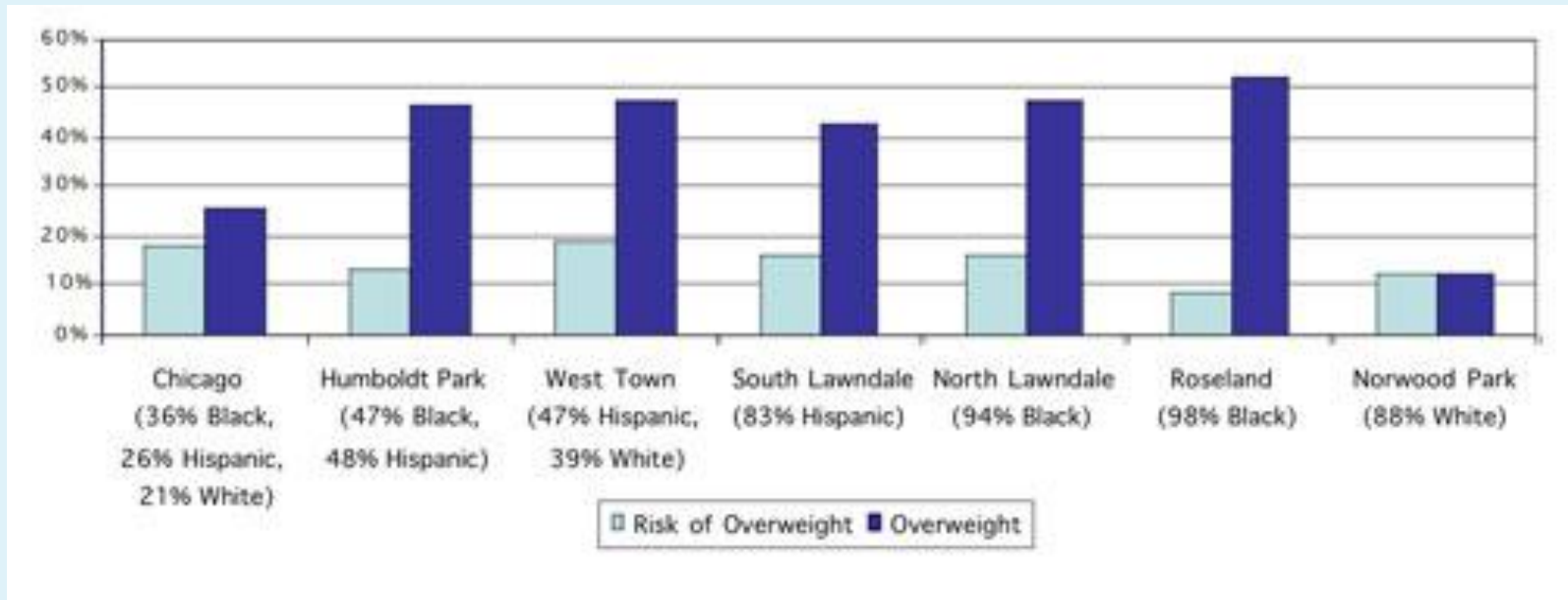


# The Issue: Child Overweight in Chicago



Ogden et al, 2006; Mason et al, 2006; IDPH, 2006.

# Overweight Varies by Neighborhood



Whitman et al, 2004.



# What is Child Overweight?

- Overweight vs. Obesity
- Overweight = 85<sup>th</sup> to 94<sup>th</sup> percentile for age and gender
- Obese =  $\geq$ 95<sup>th</sup> percentile of other children the same age and gender
- Takes into account:
  - Differences in growth patterns between boys and girls
  - Changes in growth rates as children grow older
  - Growth spurts

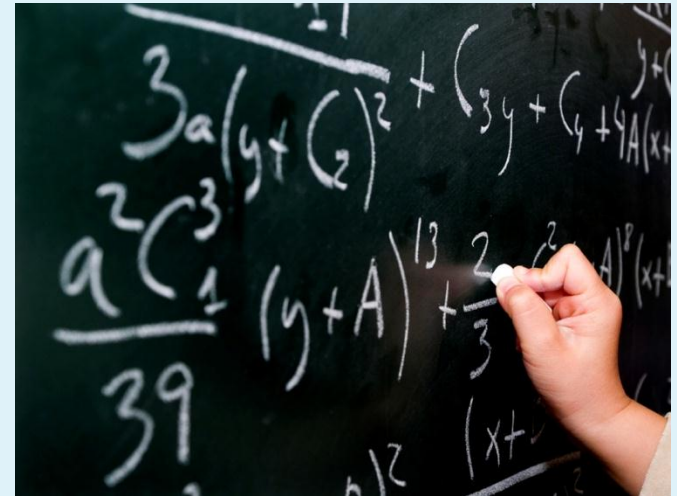
# What does research show?



# Health Impacts Student Performance

“Health and success in school are interrelated. Schools cannot achieve their primary mission of education if students and staff are not healthy and fit physically, mentally, and socially.”

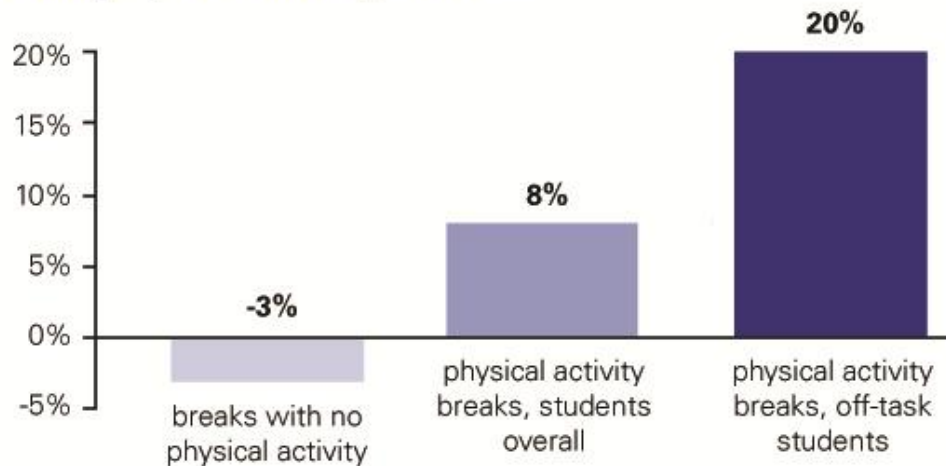
National Association of State Boards of Education. Fit, Healthy and Ready to Learn Part 1: Physical Activity, Healthy Eating and Tobacco Use Prevention, 2000.



# Physical Activity - in the Classroom

Opportunity for physical activity during the day improves student behavior, particularly for students with difficulty staying focused.

**Elementary students' on-task classroom behavior improves with physical activity breaks<sup>35</sup>**



Daily 10-minute activity breaks increased classroom behavior of children in K-4th grade.

Active Education: Physical Education, Physical Activity and Academic Performance. 2007.



# The Thing About Recess

- Safe opportunities for physical activity during the school day are important, however:
  - Recess can help students learn cooperative skills, conflict resolution, problem-solving and develop social-emotionally.
  - *Requiring* physical activity during recess may diminish these opportunities
  - Recess in very short spurts (less than 20 minutes) may not provide physical health benefits
  - Recess is not the same as physical education – which includes more formal skill-building

*Recess for Elementary Students. (NASPE, 2006).*



# Physical Education

Physical education achievement is linked to academic performance.

- Students who performed well on fitness tests also performed well on standardized English and Math tests.

Figure 2. 2005 Cambridge Public School Percentage of Students Who Passed English MCAS by Number of Fitness Tests Passed, Controlling for Gender, Ethnicity, and Lunch Status (Combined Fourth, Sixth, and Eighth Grade)

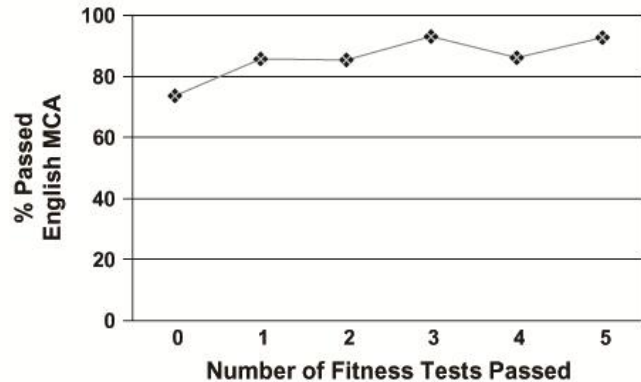
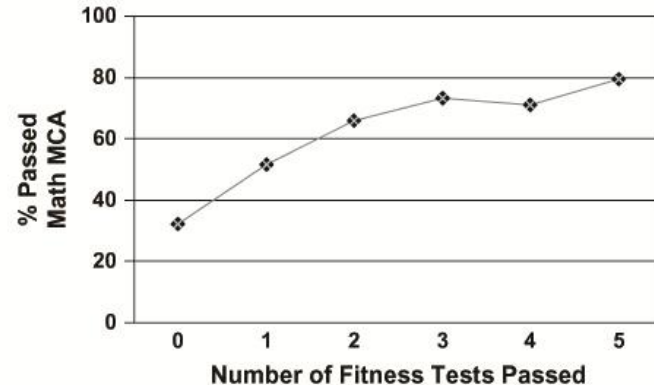


Figure 1. 2005 Cambridge Public School Percentage of Students Who Passed Math MCAS by Number of Fitness Tests Passed, Controlling for Gender, Ethnicity, and Lunch Status (Combined Fourth, Sixth, and Eighth Grade)



Chomitz, et al. Journal of School Health. January 2009.

# Food in School

- Undernourished children earn lower test scores and have difficulty concentrating.
  - Action for Healthy Kids: The Learning Connection- The Value of Improving Nutrition and Physical Activity in Our Schools.
- Nationally, only 8% of schools offered lunches that were consistent with the 2005 Dietary Guidelines and over 75% did not meet standards for total fat, saturated fat, and fiber.
  - RWJF: Improving Child Nutrition Policy: Insights from National USDA Study of School Food Environments 2009.



# School Lunch

- Students who are offered fresh fruits and raw vegetables daily =
  - Consume FEWER calories from low-nutrient, energy dense “junk foods”
  - Eat MORE fruits and vegetables
- Commodity foods like pizza and chicken nuggets =
  - Make up 40% of the lunch entrees available in the National School Lunch Program
  - Are the top contributors of calories, fat, and sodium in national school lunches



RWJF: Improving Child Nutrition Policy: Insights from National USDA Study of School Food Environments 2009.





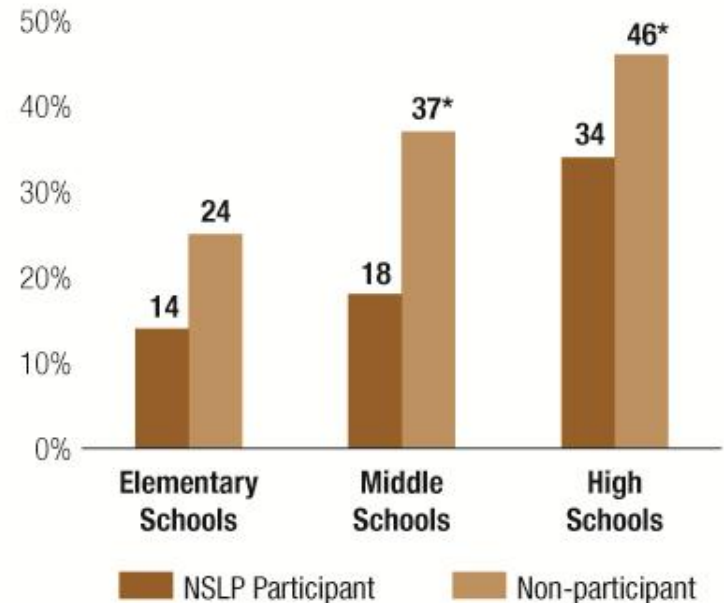
# Competitive Foods

- Restricting access to competitive foods reduces calorie intake and increases student participation in the school lunch program.
- Students who attended middle and high schools with competitive food (i.e. vending machine) restrictions consumed fewer calories from sugar-sweetened beverages.

RWJF: Improving Child Nutrition Policy: Insights from National USDA Study of School Food Environments 2009.

## National School Lunch Program Participants Less Likely to Eat Competitive Foods at School

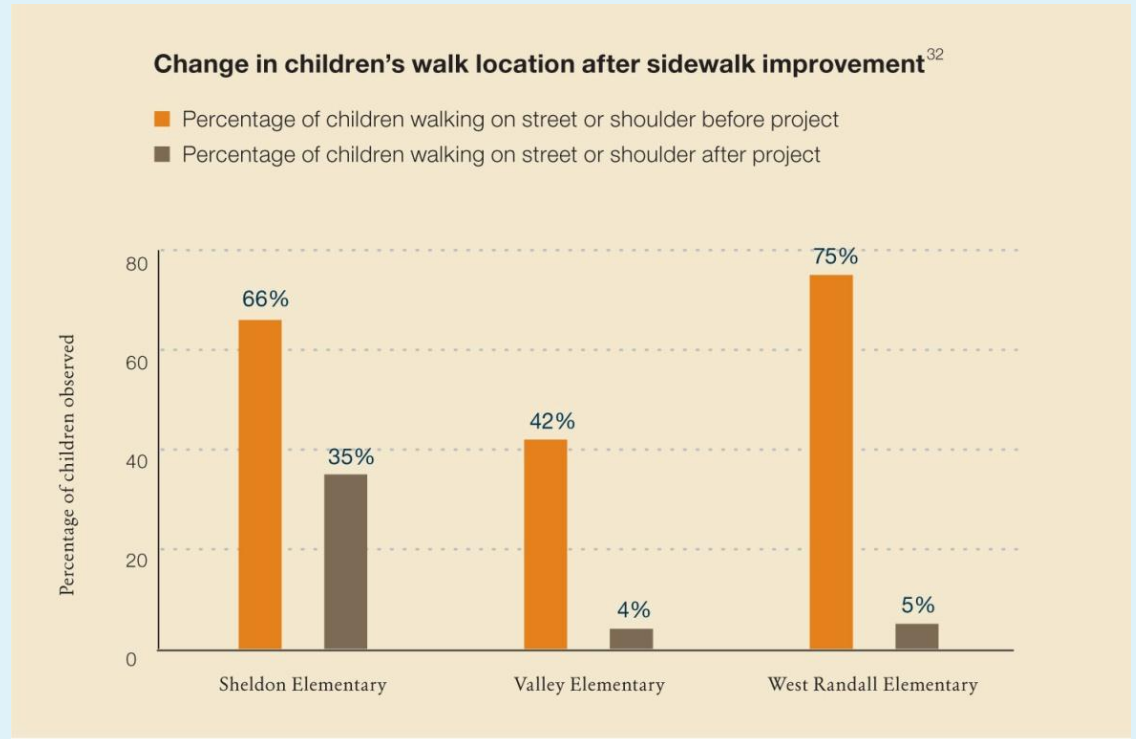
Percentage of Students Consuming Competitive Foods on School Days



\* Difference is statistically significant at the .01 level.

# Safe Routes to School

- Walking to school is associated with higher levels of physical activity throughout the day.
- Children are more likely to walk to school when the sidewalks are in good condition.

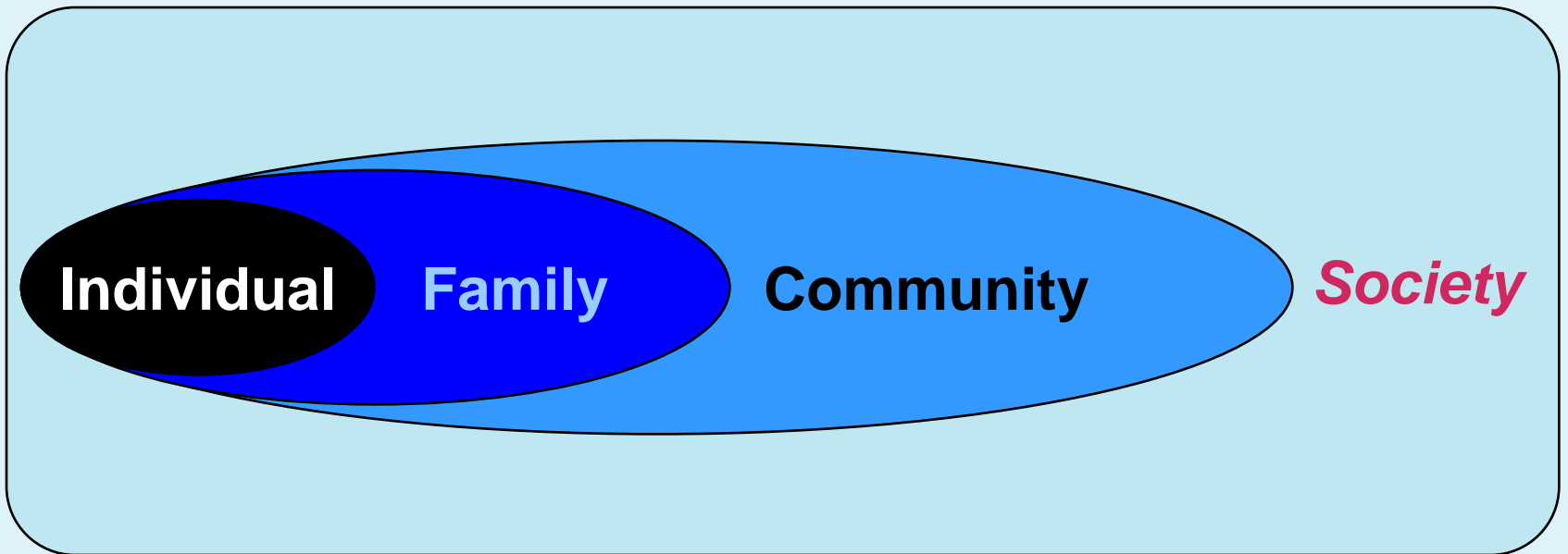


RWJF Action Strategies Toolkit: A Guide for Local and State Leaders Working to Create Healthy Communities and Prevent Childhood Obesity. May 2009.



# Addressing Childhood Obesity

An ecologic approach is required



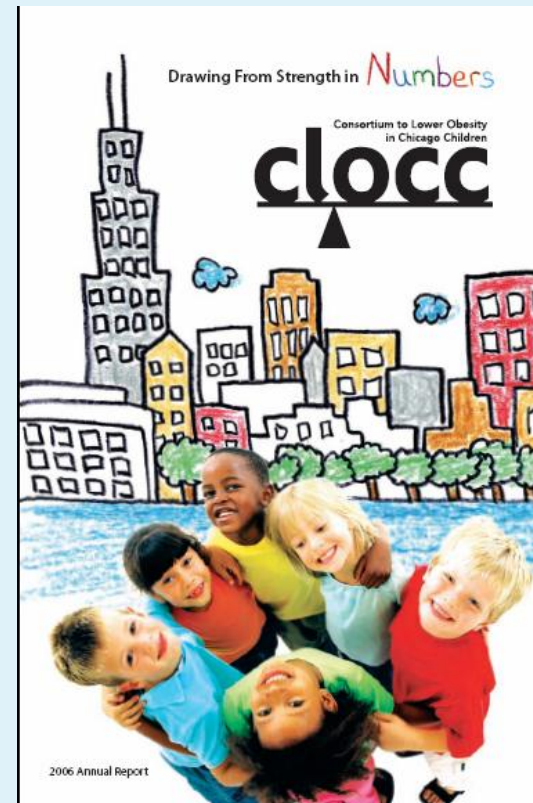
# Factors that Impact Childhood Obesity in the School Setting



- Physical activity (during the school day and after-school)
- Physical Education (active and comprehensive)
- Healthy food availability, limited access to unhealthy foods
- Safe routes to school
- Safe playgrounds and gyms with time in school to use, open to community after school

# Consortium to Lower Obesity in Chicago Children: Mission

- Confront childhood obesity
  - Promote healthy and active lifestyles for children
  - In Chicago metro area
- Make connections
  - Community-based organizations, schools, parks, researchers, doctors, policy-makers
  - Children, families, and communities



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# Public Education Campaign



- 5** or more servings of fruits & vegetables a day
- 4** servings of water a day
- 3** servings of low-fat dairy a day
- 2** hours or less of screen time a day
- 1** hour or more of physical activity a day



# How CLOCC Promotes Obesity Prevention in Schools

- **District Level: City of Chicago Inter-Departmental Task Force on Childhood Obesity**
  - Work closely with the city agencies in IDTF (including Chicago Public Schools and Chicago Park District) to address their role in preventing childhood obesity



# How CLOCC Promotes Obesity Prevention in Schools

## City-Wide Level: School Systems Working Group



- School program providers, organizations, and staff from CPS, Archdiocese, and charter schools collaboratively address obesity prevention in schools
- Past Projects: Physical Activity in Schools Meeting, Chicago Moves Day
- Current Project: Healthy Teacher Network





# A Few Suggestions for Teachers

- Promote the *5-4-3-2-1 Go!* message in your classroom or other student-focused activities
- Incorporate nutrition education, regardless of your subject
- Give students opportunities to be active whenever you can
- Encourage your administration to ensure all students have after-school options that promote healthy eating and physical activity
- Support a shift from unhealthy fundraisers to healthier options
- Offer water, healthy snacks, and opportunities for students to taste fruits and vegetables.
- Work with community partners to improve the environment around the school and promote walking and biking to school
- Engage your students as advocates of healthy lifestyles

Thank You!