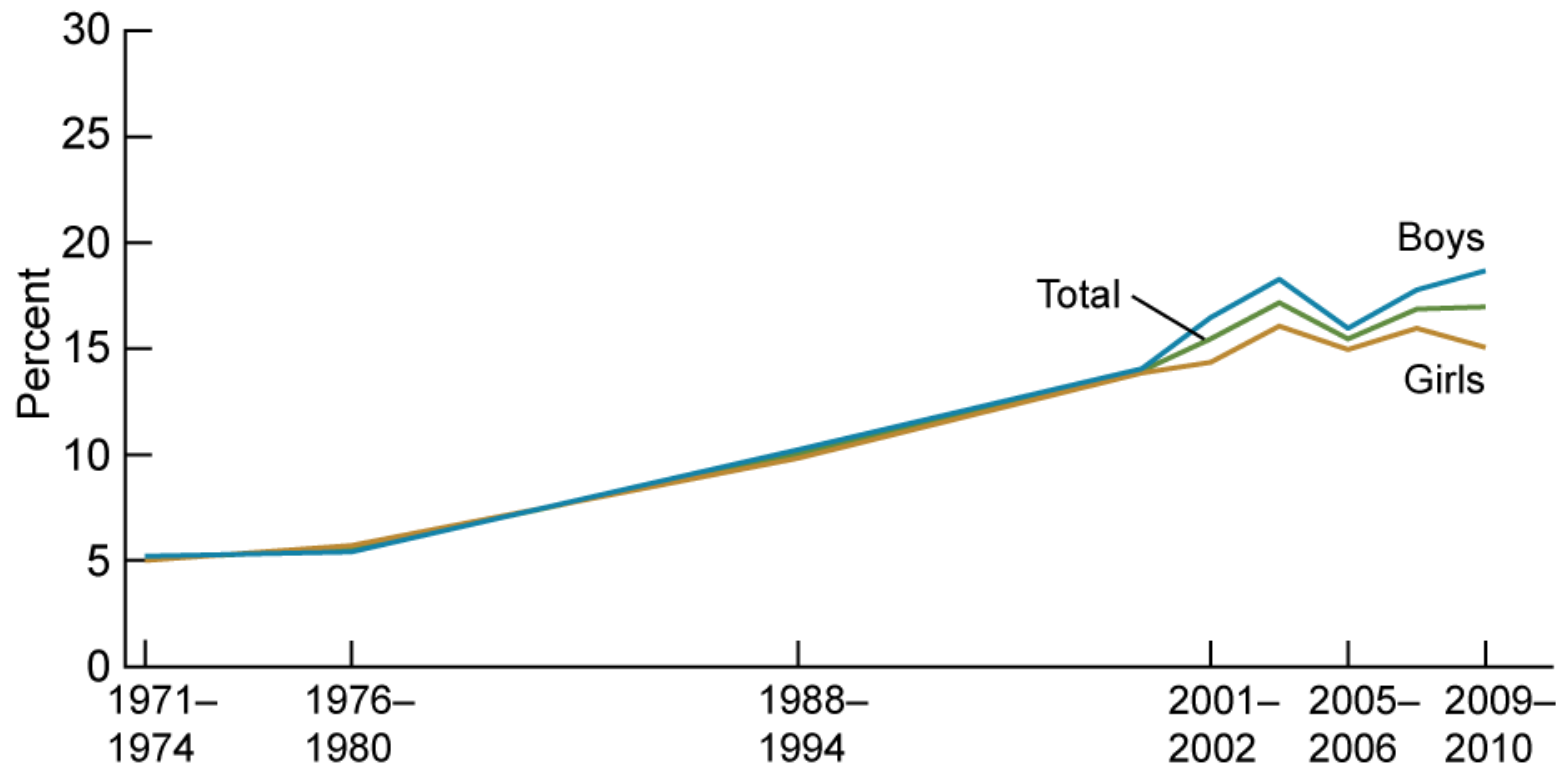


Adolescent Obesity Prevention: Success in Schools

Martha Archuleta, PhD, RD

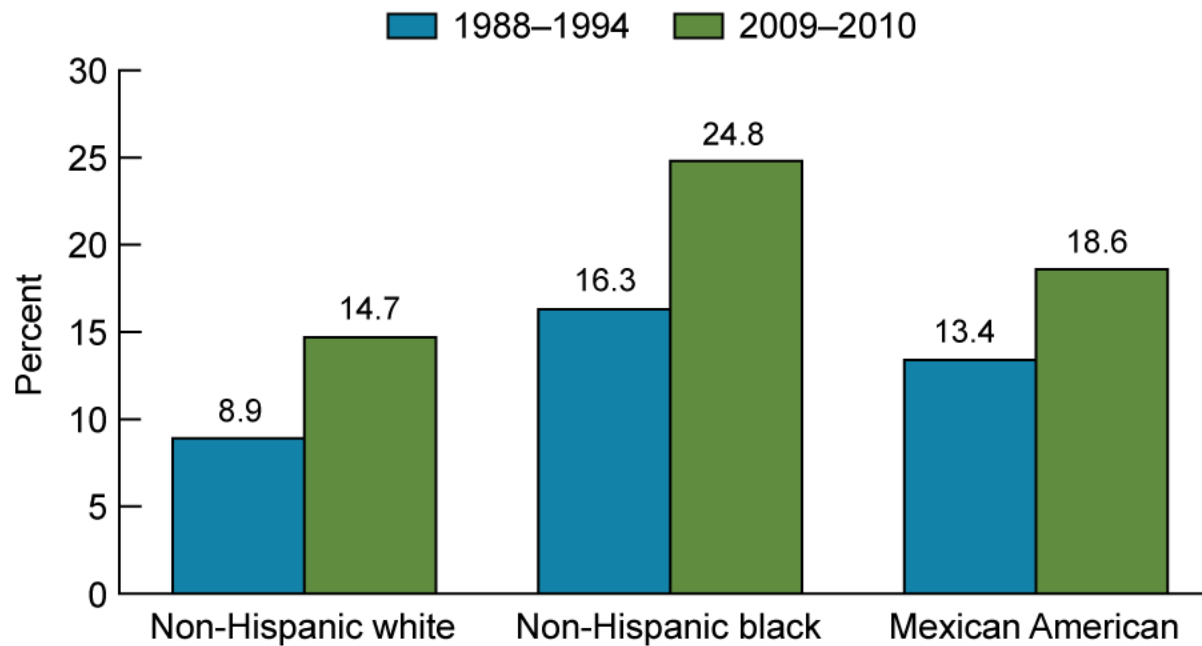
USU Nutrition, Dietetics & Food Sciences

Figure 1: Trends in obesity among children and adolescents aged 2–19 years, by sex: United States, 1971–1974 through 2009–2010



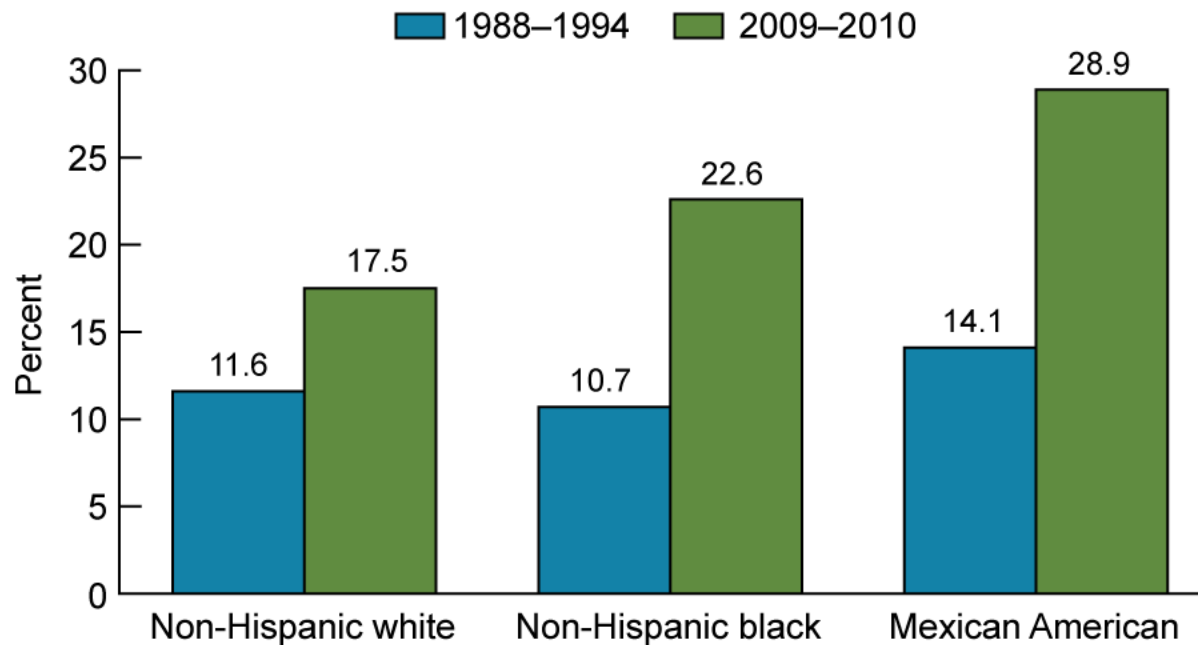
NOTE: Obesity is body mass index greater than or equal to the 95th percentile of the sex- and age-specific 2000 CDC growth charts.
SOURCES: CDC/NCHS, National Health and Nutrition Examination Surveys (NHANES) I–III; and NHANES, 1999–2000, 2001–2002, 2003–2004, 2005–2006, 2007–2008, and 2009–2010.

Figure 3: Prevalence of obesity among girls aged 12–19 years, by race and ethnicity: United States, 1988–1994 and 2009–2010



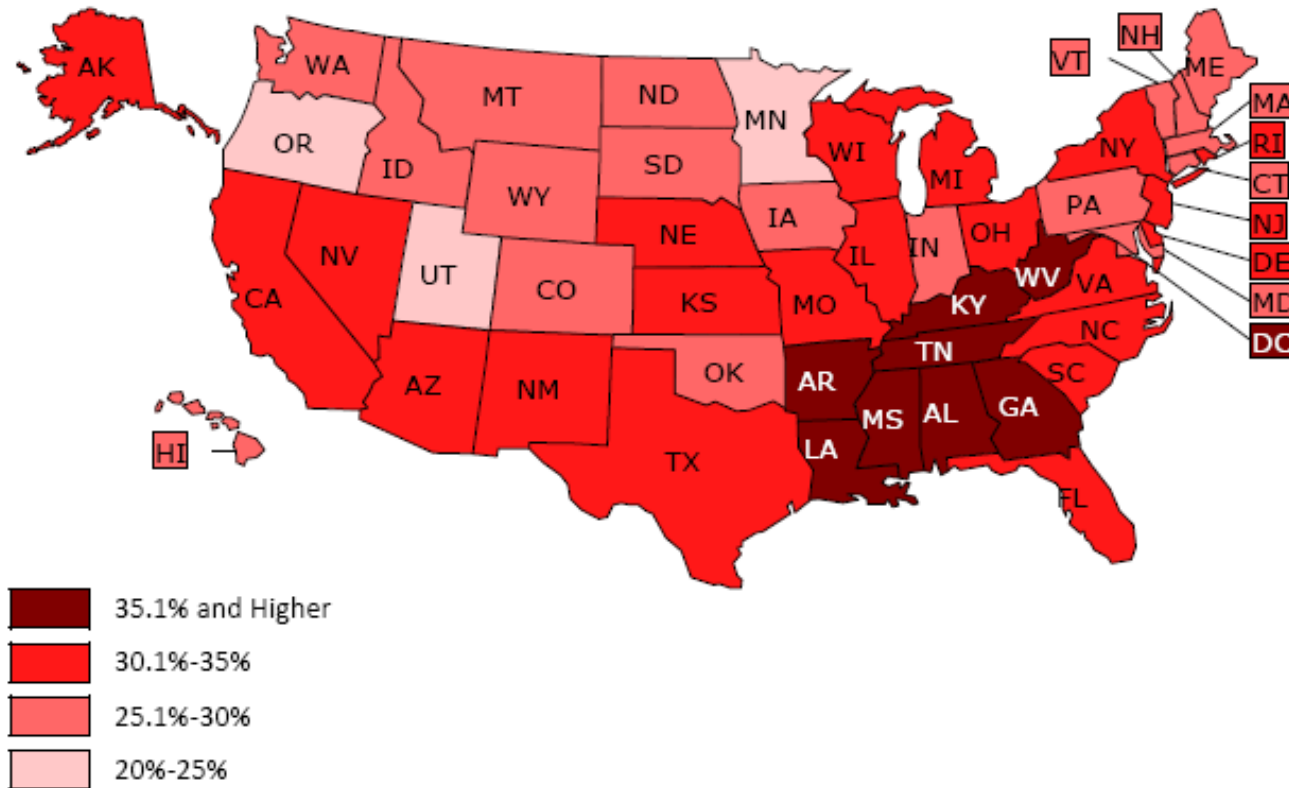
NOTE: Obesity is body mass index greater than or equal to the 95th percentile from the sex- and age-specific 2000 CDC growth charts.
SOURCES: CDC/NCHS, National Health and Nutrition Examination Survey (NHANES) III, 1988–1994, and NHANES, 2009–2010.

Figure 2: Prevalence of obesity among boys aged 12–19 years, by race and ethnicity: United States, 1988–1994 and 2009–2010



NOTE: Obesity is body mass index greater than or equal to the 95th percentile of the sex- and age-specific 2000 CDC growth charts.
SOURCES: CDC/NCHS, National Health and Nutrition Examination Survey (NHANES) III, 1988–1994, and NHANES, 2009–2010.

2007 Rates of Overweight and Obese Children



Source: Childhood Obesity Action Network. State Obesity Profiles, 2009. National Initiative for Children's Healthcare Quality, Child Policy Research Center, and Child and Adolescent Health Measurement Initiative.

Retrieved from National Conference of State Legislatures website: <http://www.ncsl.org/issues-research/health/childhood-obesity-trends-state-rates.aspx>

Declining Childhood Obesity Rates in

Place	Ages	Time 1	Obesity Rate at Time 1	Time 2	Obesity Rate at Time 2	Percent Decline
Philadelphia	K–12	2006-07 school year	21.5%	2009-10 school year	20.5%	-4.7%
New York City	K–8	2006-07 school year	21.9%	2010-11 school year	20.7%	-5.5%
Mississippi	K–5	Spring 2005	43%†	Spring 2011	37.3%†	-13.3%
California	Grades 5, 7, 9	2005‡	38.44%†	2010‡	38%†	-1.1%

† Combined rates of overweight and obesity

‡ Data calculated from the 2005 and 2010 California Physical Fitness Test, California Department of Education

From Robert Wood Johnson Foundation
www.rwjf.org/healthpolicy

Strategies

- Philadelphia
 - Food Trust: fresh foods at corner stores, connect schools with local farms, bring supermarkets to underserved areas, farmers' markets accept food stamps
 - Strong nutrition standards in schools
- New York City
 - Calorie info on menus
 - Active design guidelines for architects and planners
 - Green Cart and Healthy Bucks to help low-income families buy local produce
 - Strong nutrition standards in schools

Strategies

- **Mississippi**
 - State Board of Education set nutritional standards for foods and beverages in vending machines
 - Healthy Students Act requires more PE time, healthier foods and beverages and health education
- **California**
 - Strong nutrition standards for school snacks
 - Prohibits sugar-sweetened beverages in high schools
- **Both states**
 - Initiatives and policies that promote physical activity and healthy eating in communities

Alliance for a Healthier Generation

- Founded by American Heart Association and Clinton Foundation. Major funding from Robert Wood Johnson Foundation
- **Healthy Schools Program** launched in 2006
- More than 15,000 schools and 9 million students

Healthy Schools Program

1. School Policies and Systems
2. School Meals
3. Competitive Foods and Beverages
4. Physical Activity
5. Health Education
6. Physical Education
7. Before- and After School Programs
8. Employee Wellness

Healthy Schools Program Successes

↑ Physical education time

↓ Sugar sweetened beverages

↓ BMI

Think, Pair, Share

- Which of the Healthy Schools Program strategies is your school implementing?
- What do you think has been the most effective?
- What would you like to see implemented that has not been implemented?

FACS Nutrition Classes

- Standards that support understanding of nutrition principles and maintaining a healthy lifestyle
- Unique opportunity for food skills education

Food Skills and Healthy Diet

- People with proficiency in skills such as cooking and basic meal planning have healthier diets (Larsen et al)
- Out-of-home eating associated with higher body weight (Bezerra et al)
- College students with lowest cooking ability eat out more (Byrd-Bredbenner)
- Barriers for college students: not familiar with cooking, lack of time, shopping, cleanup (Byrd-Bredbenner)

FACS Nutrition Classes and Food Skills

- Resurgence in interest in cooking
- Cooking and other food skills gaining more prominence in nutrition education programs
- FACS nutrition classes already emphasize hands-on skill development
- Kitchens!!!

Think, Pair, Share

- What are some of your favorite cooking activities that support healthy eating?

Food Skills Training and Constraints

FACS Teachers in UT and TX

- 89% of teachers disagreed with the statement that “students at my school eat healthy most of the time” but 85% indicated students are interested in learning to cook
- 76% of teachers spend 50% or less of class time conducting cooking or food preparation activities and less than half have students cook a complete meal using MyPlate concepts
 - 89% would like to do more if there were fewer constraints
 - 99% thought students would enjoy doing more cooking

Food Skills Training and Constraints

FACS Teachers in UT and TX

- Top constraints
 - short class periods
 - large numbers of students
 - budget limitations
 - pressure to teach to state standards

Think, Pair, Share

- Do you encounter any of these constraints?
- Do you have strategies for overcoming any of these constraints?

Food Skills Education Policy Efforts

- JAMA editorial “Bring Back Home Economics Education”
- Washington Post and LA Times articles
- UK legislation just passed for mandatory cooking education in schools

Possible New Emphases

- Meals-based approaches
- Use of technology
- Family involvement
- Increased collaboration with FACS and nutrition educators

FACS Educators

A powerful force in improving
the nutrition and health of our
youth and future generations!