



AMERICAN PSYCHOLOGICAL ASSOCIATION

ANNUAL CONVENTION

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Why We're Concerned: Psychology's Role in Addressing the Obesity Epidemic in Black Women

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Presentation Overview

- ⊙ Epidemiology of obesity
- ⊙ Consequences of obesity
- ⊙ Factors underlying the obesity epidemic
- ⊙ The role of psychology in addressing the obesity epidemic



Obesity: U.S. Leads the World

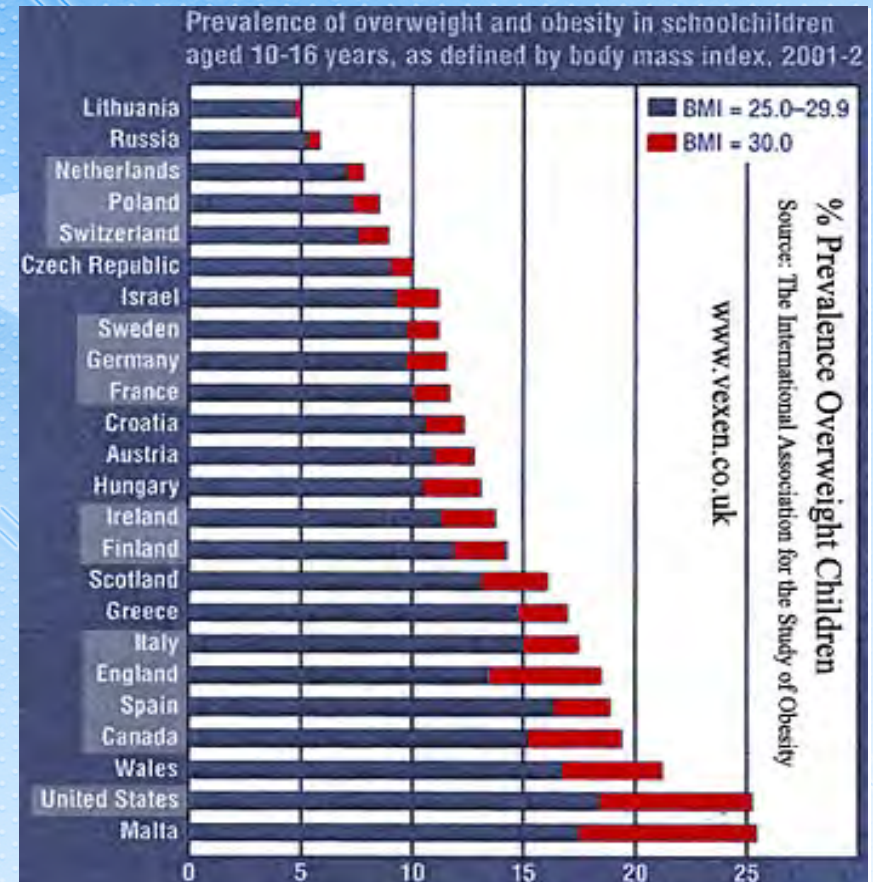
Adult Obesity



Figure 1. Percentage of obese and overweight population by country.

Source: OECD Health Statistics, 2004.

Childhood Obesity

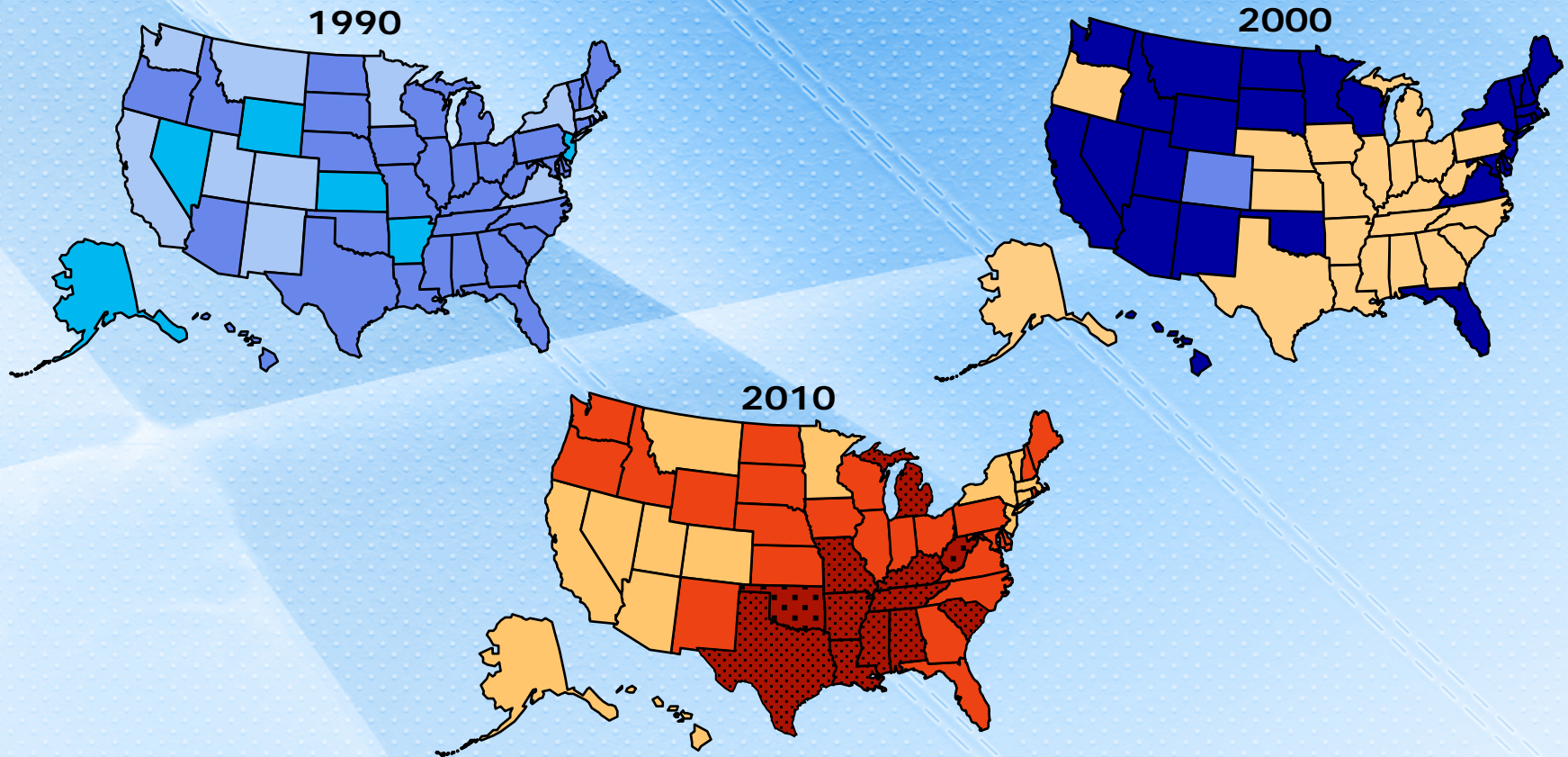


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Obesity Trends* Among U.S. Adults

BRFSS, 1990, 2000, 2010

(*BMI ≥ 30 , or about 30 lbs. overweight for 5'4" person)



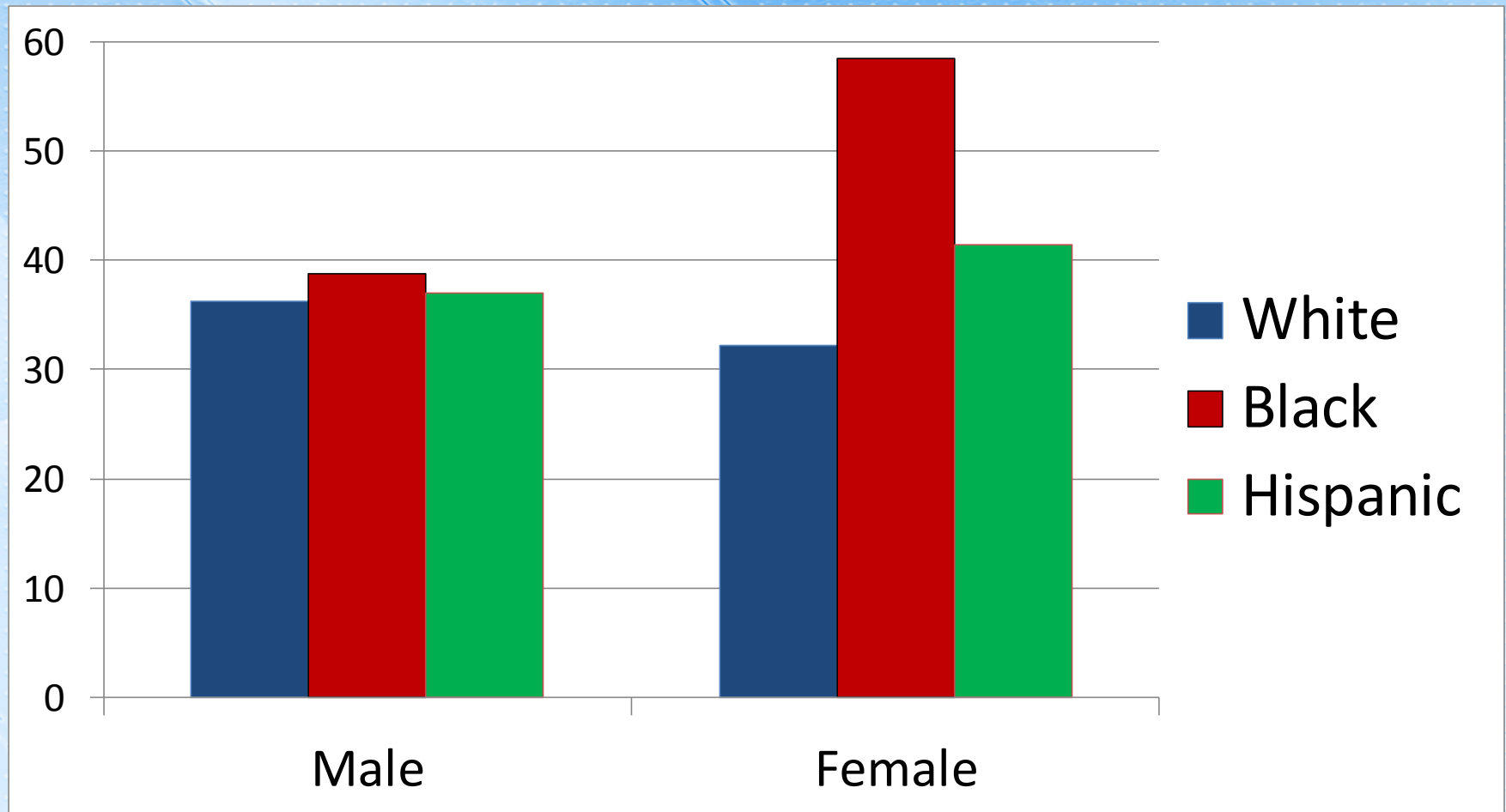
Source: CDC:

<http://www.cdc.gov/obesity/data/trends.html>



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U.S. Adult Obesity: Gender & Ethnicity

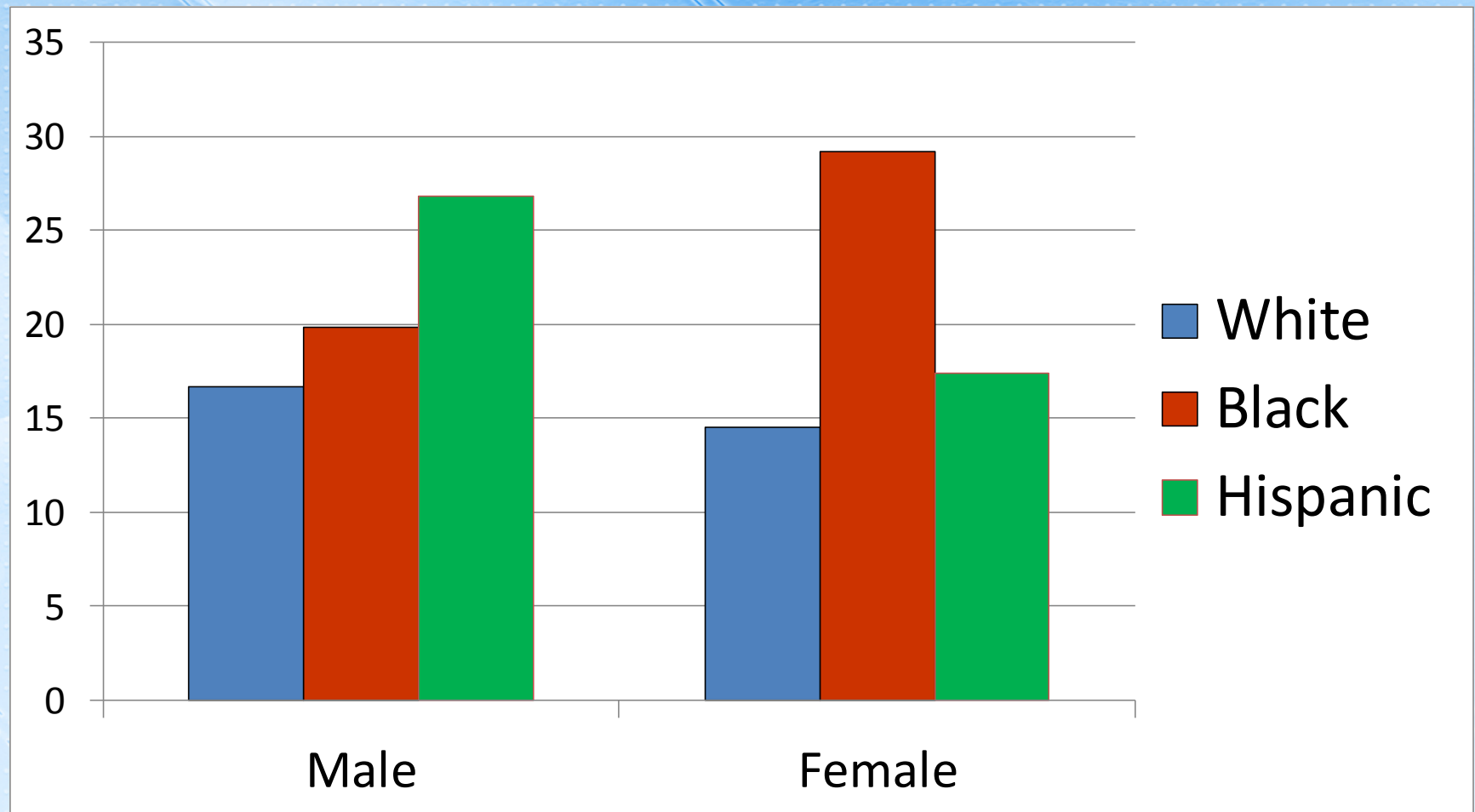


Flegel et al, JAMA 2012



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U.S. Adolescent Obesity: Gender and Ethnicity

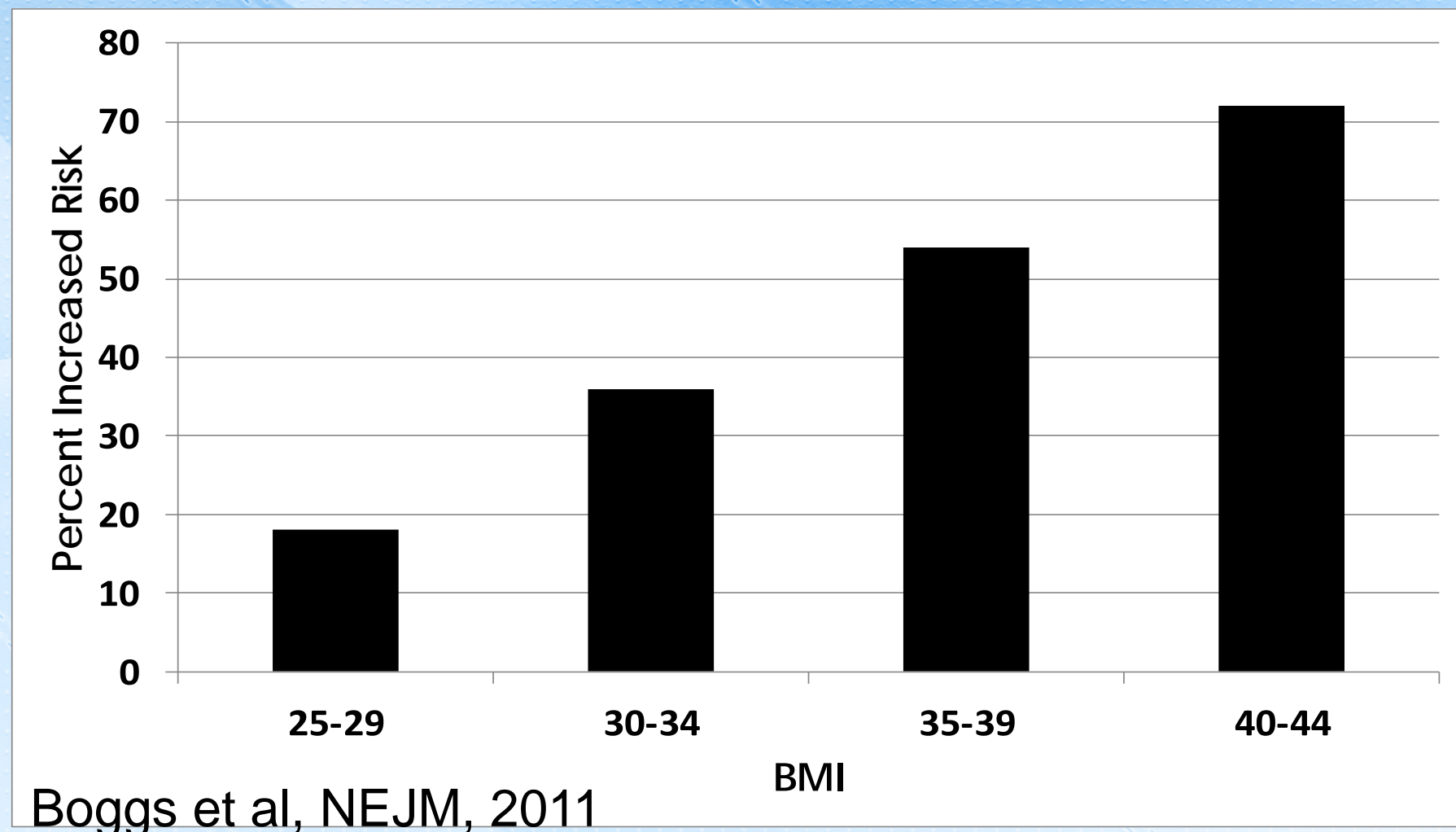


NHANES 2007-2008

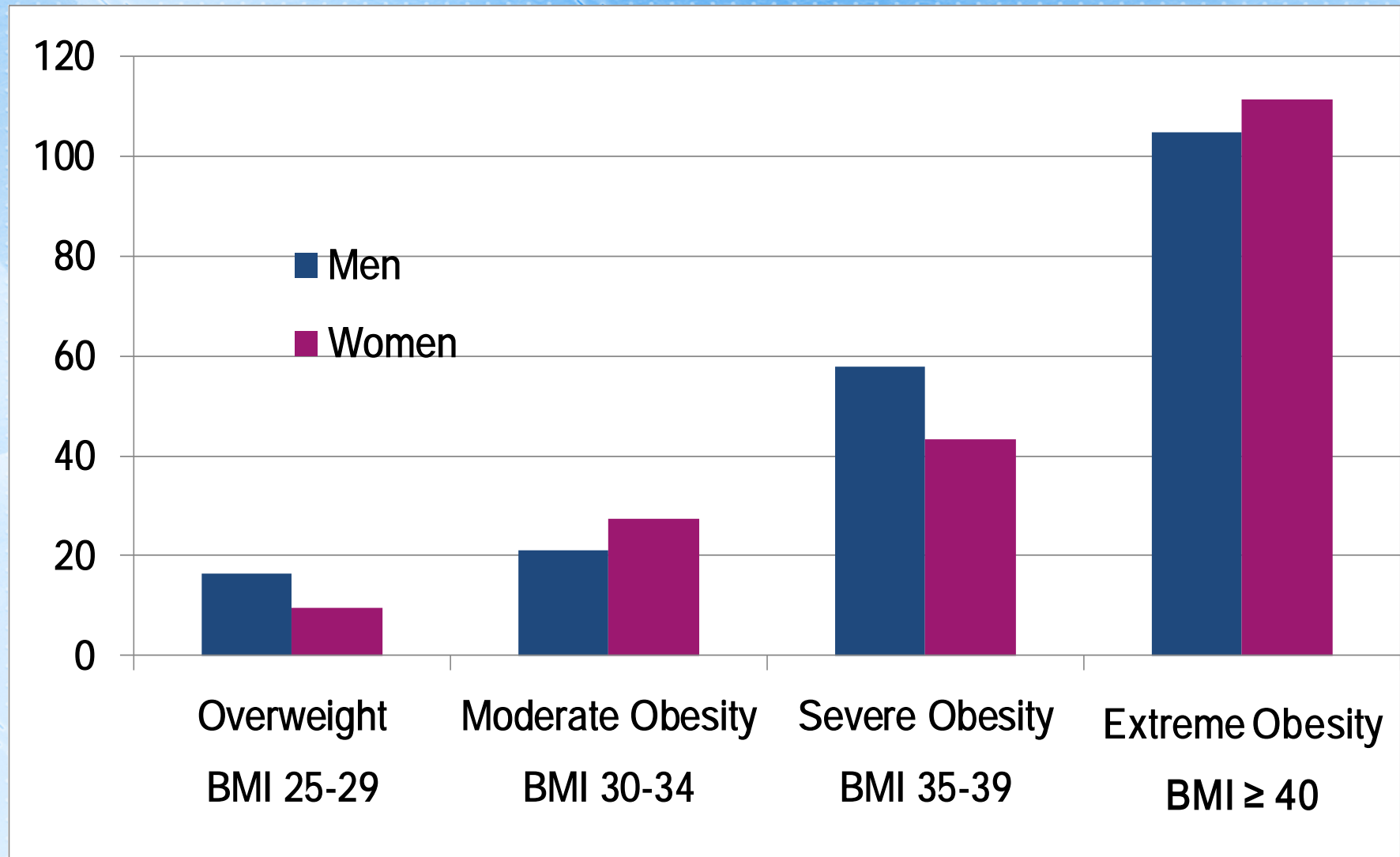


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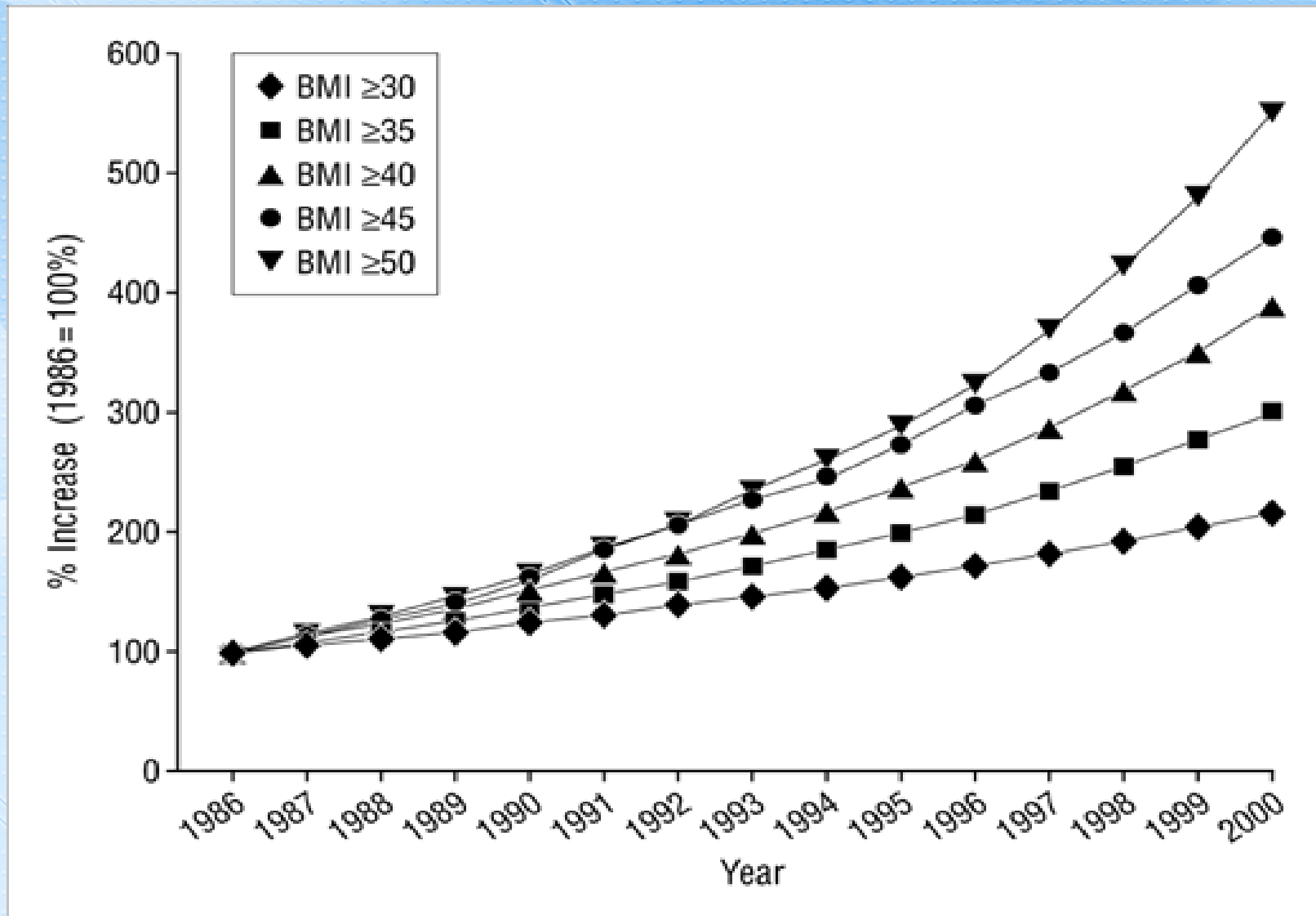
Health Consequences of Obesity: % Increased Risk of Death by Weight Status for African American Women



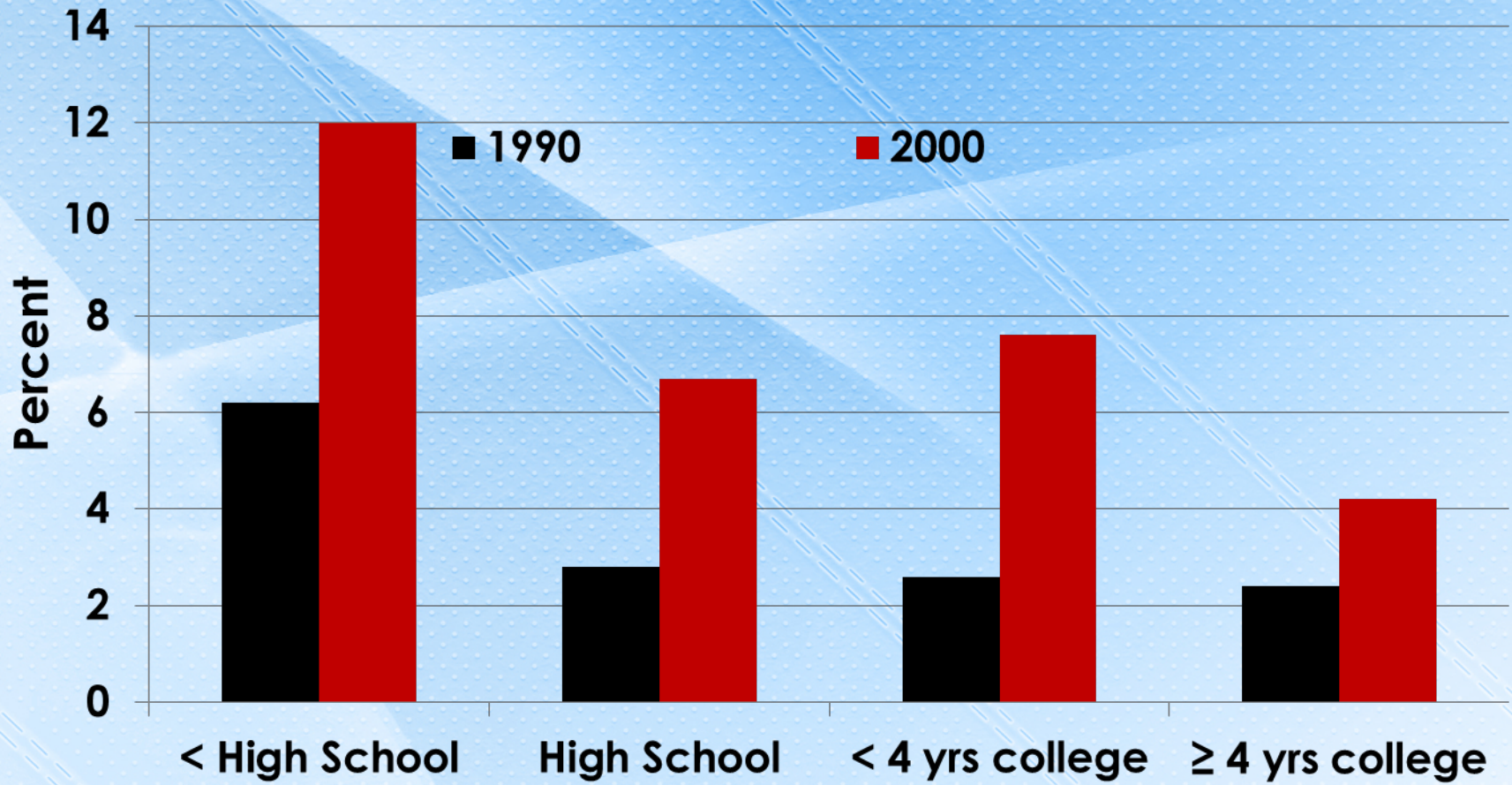
Percent Above Normal Weight Individuals' Annual Health Care Costs by Obesity Status and Gender



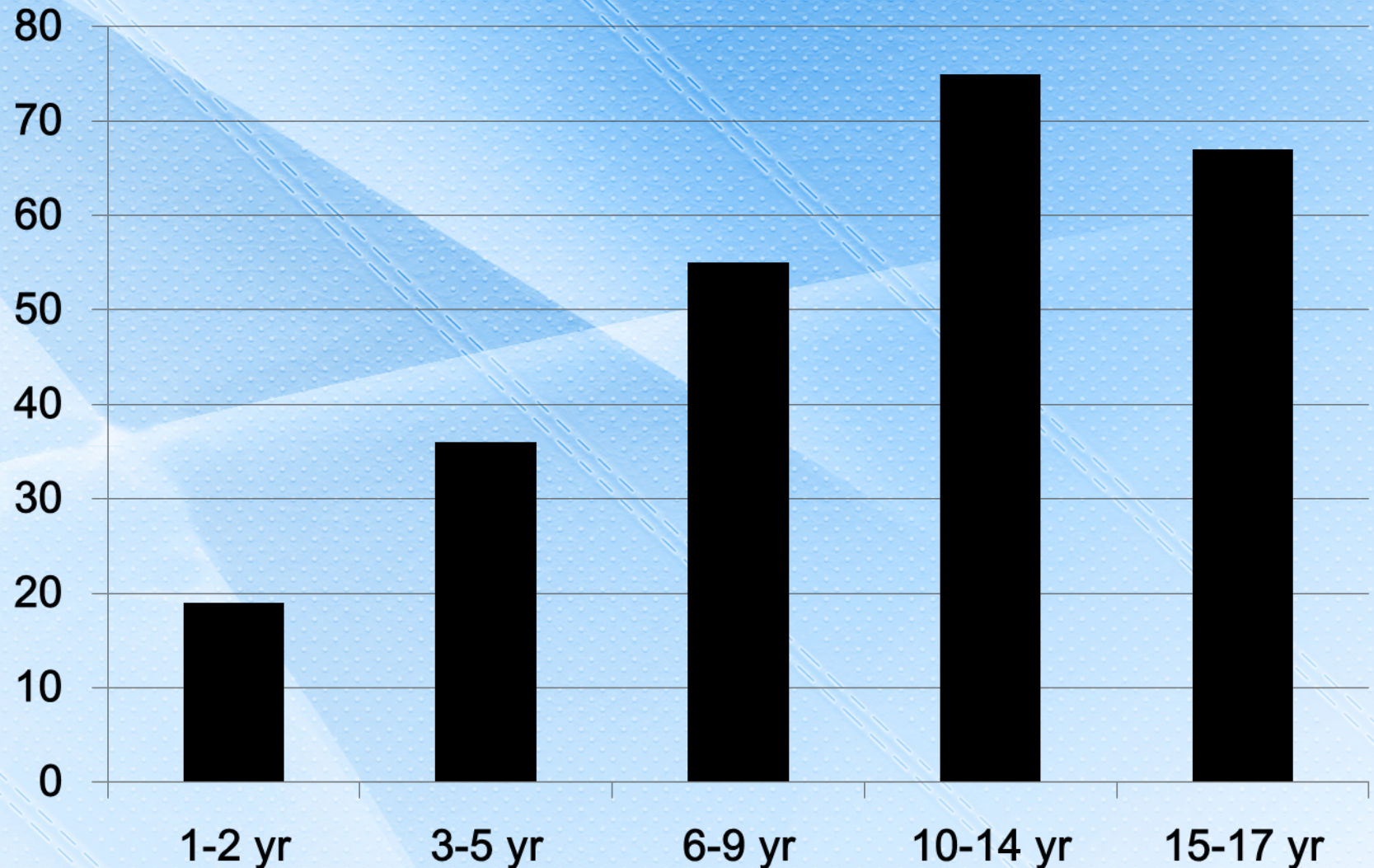
Severe Obesity is Escalating



Severe Obesity (BMI ≥ 40) is Escalating in African American Women



Childhood and Adult Obesity are Linked: Percent of Obese Children Who Become Obese Adults by Age

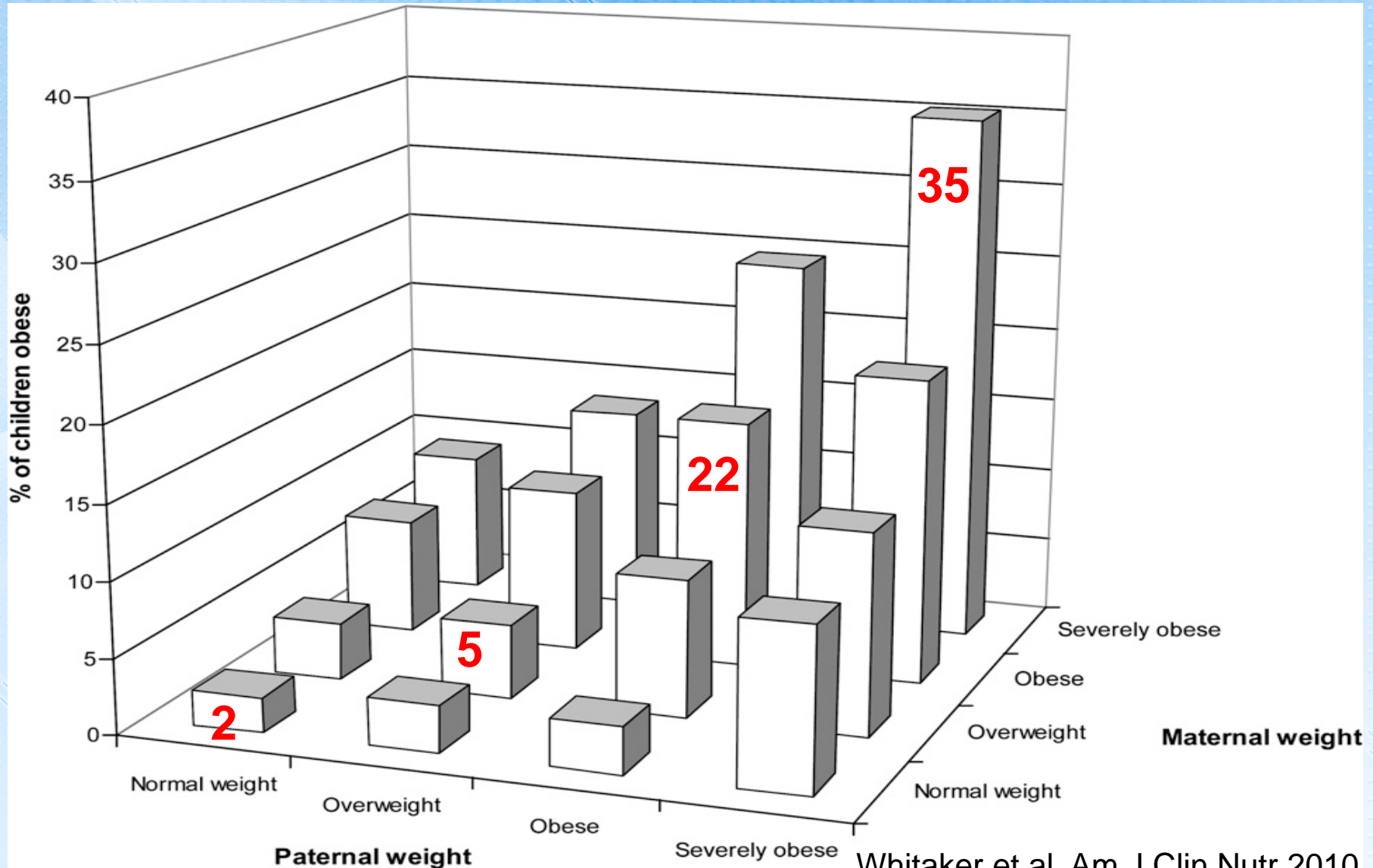


Whitaker et al, NEJM, 1997



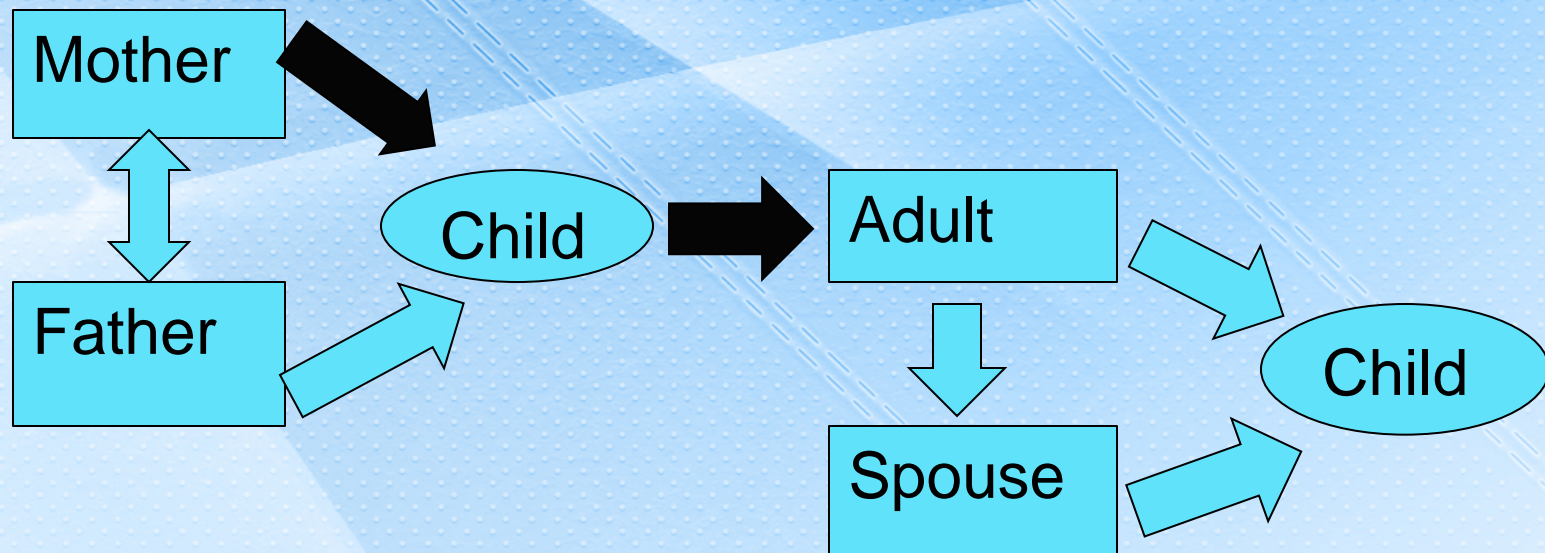
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Childhood and Adult Obesity are Linked: Percent of Obese Children by Parent Weight Status



Whitaker et al, Am J Clin Nutr 2010

Intergenerational Escalation of Obesity



Whitaker et al NEJM 1997

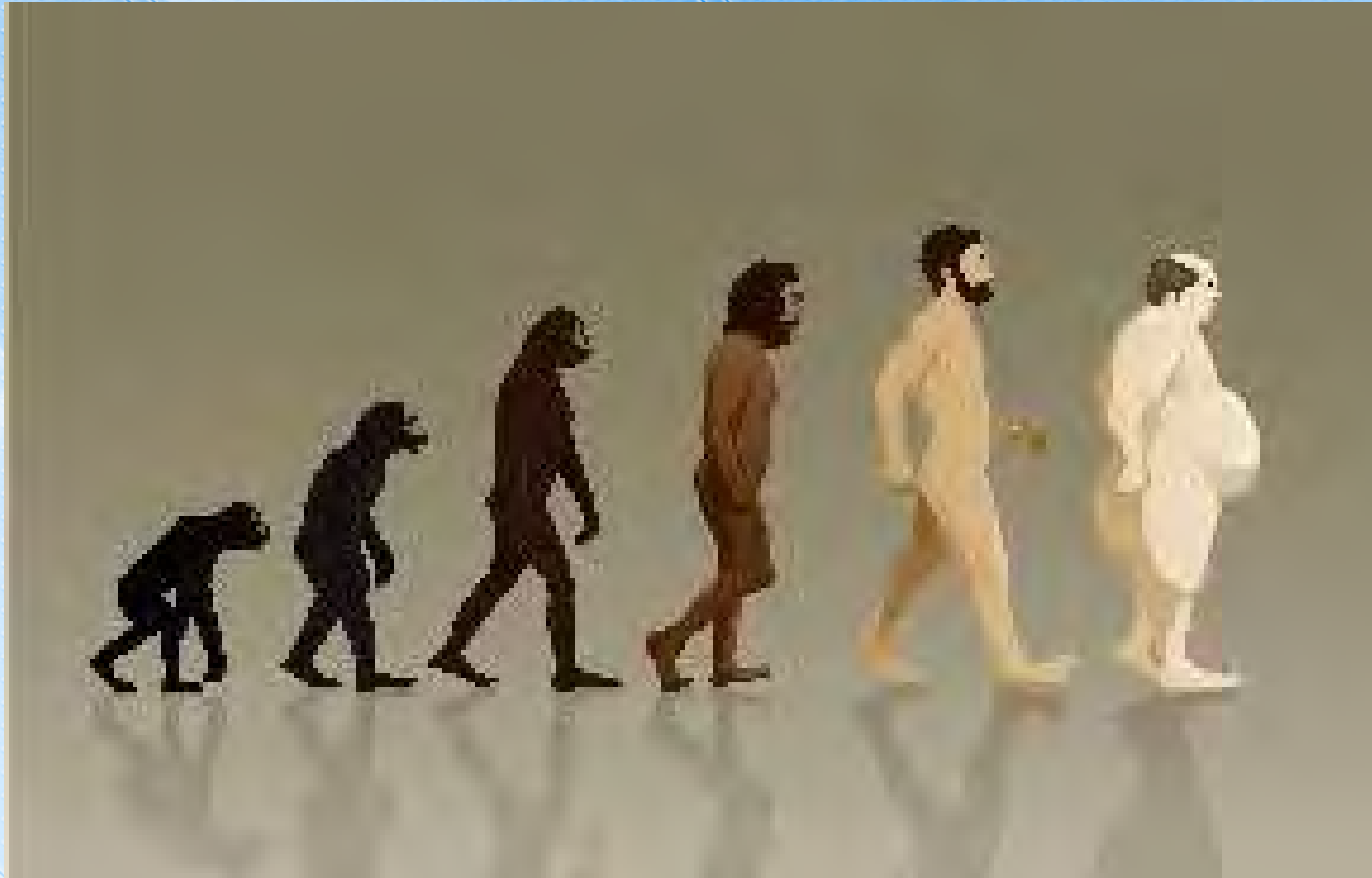
Whitaker et al Am J Clin Nutrition 2010

Murrin et al BMC Public Health 2012

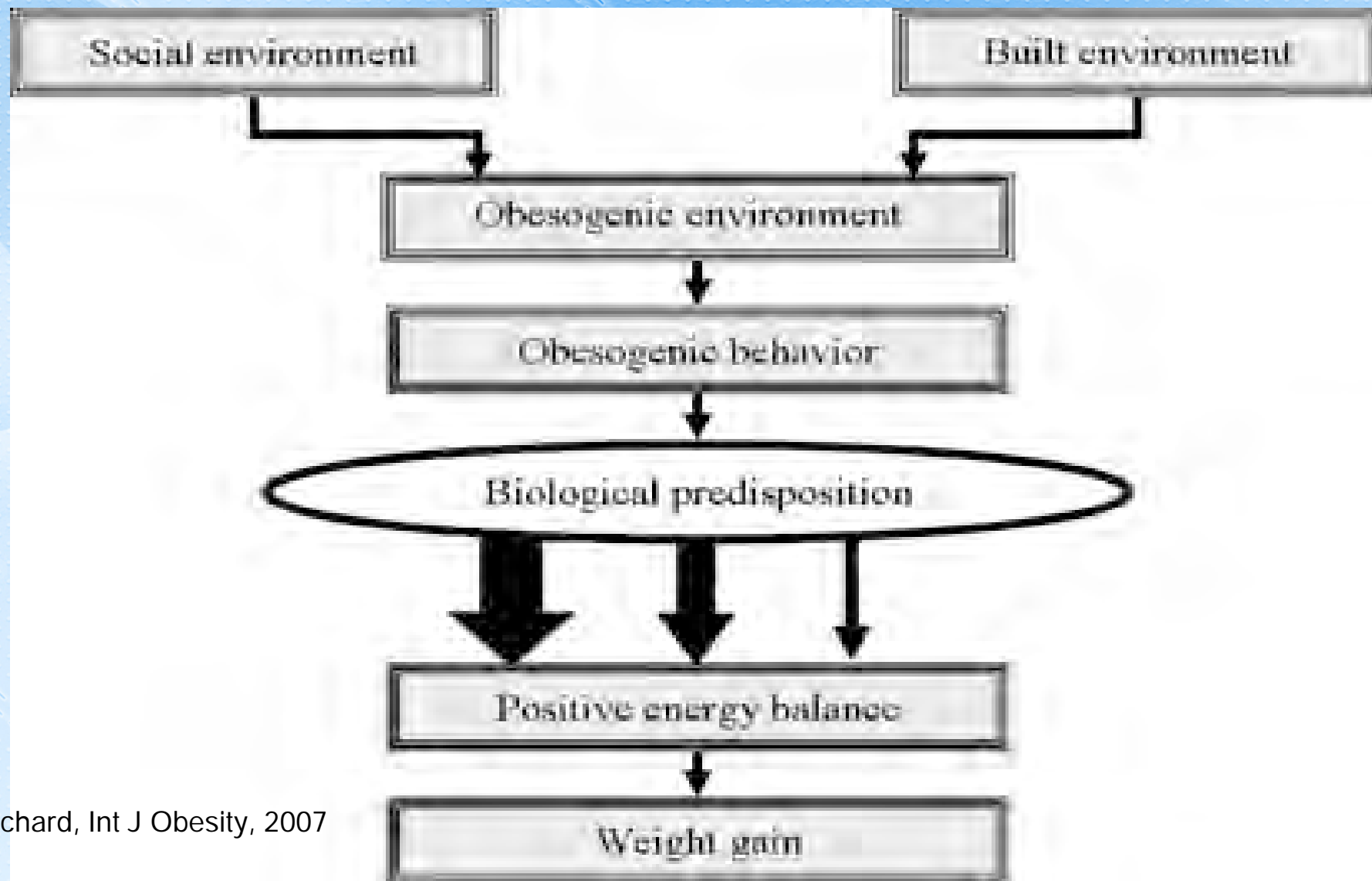


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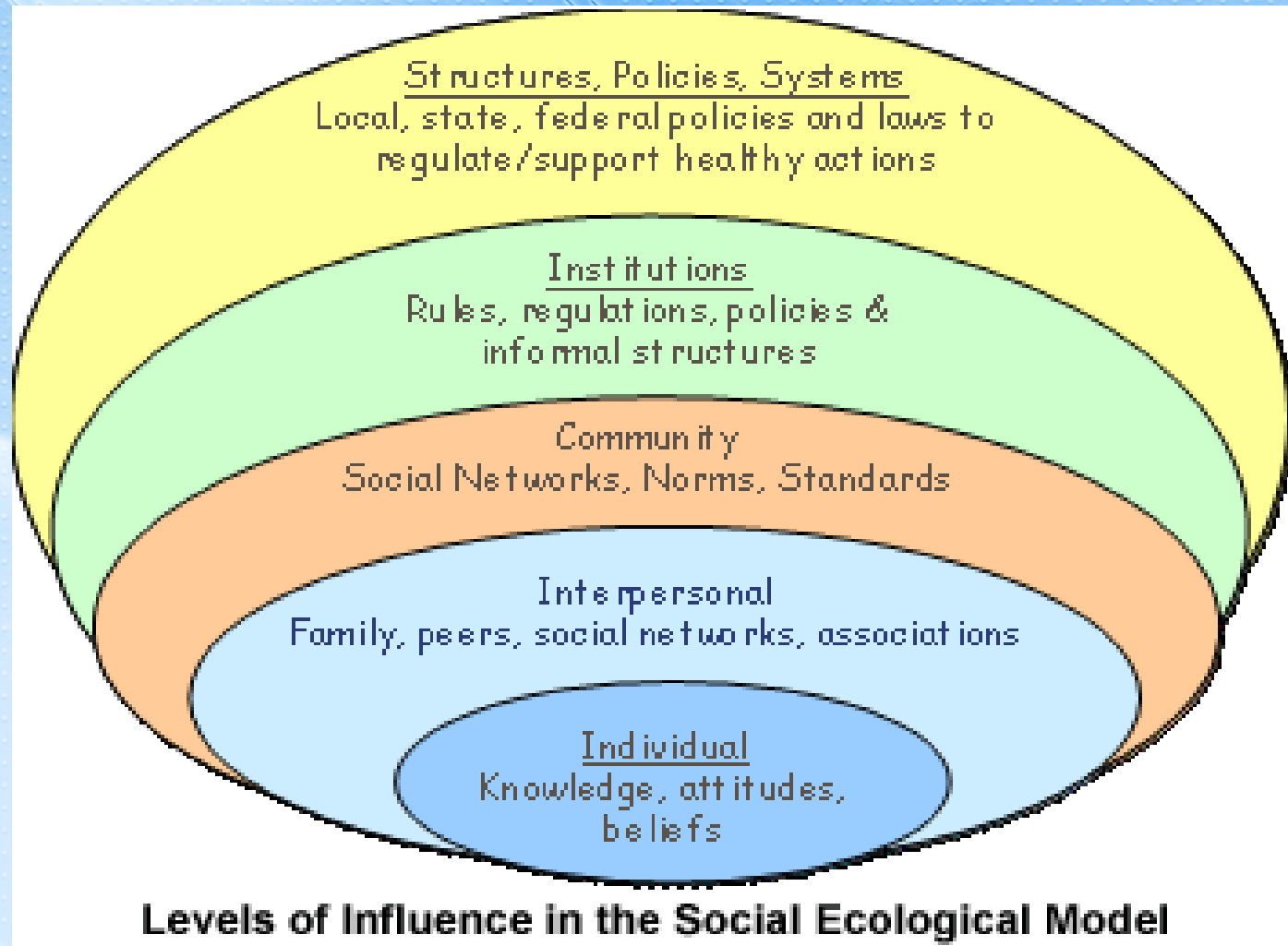
The US Obesity Epidemic : How Did this Happen? Biologic Evolution or Environmental Revolution?



The U.S. Obesity Epidemic: How Did This Happen?



The Obesogenic Environment: A Socio-Ecological Perspective



Factors Promoting Increased Calorie Consumption: Increase in US Working Mothers

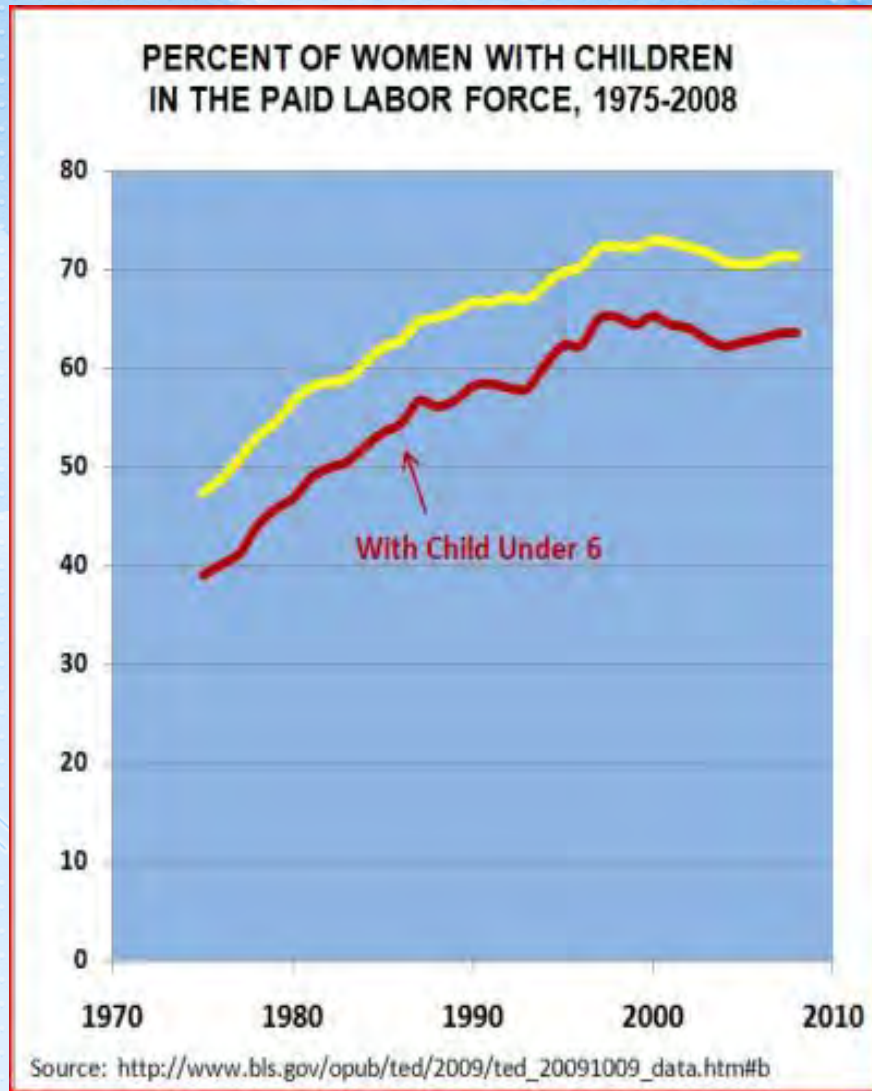
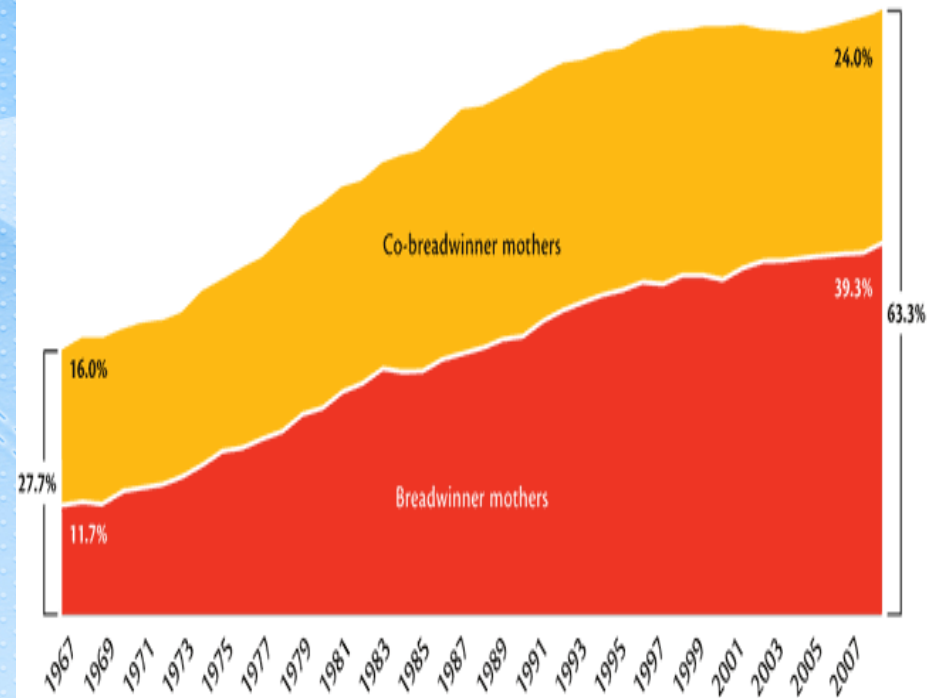


FIGURE 2

The new workforce

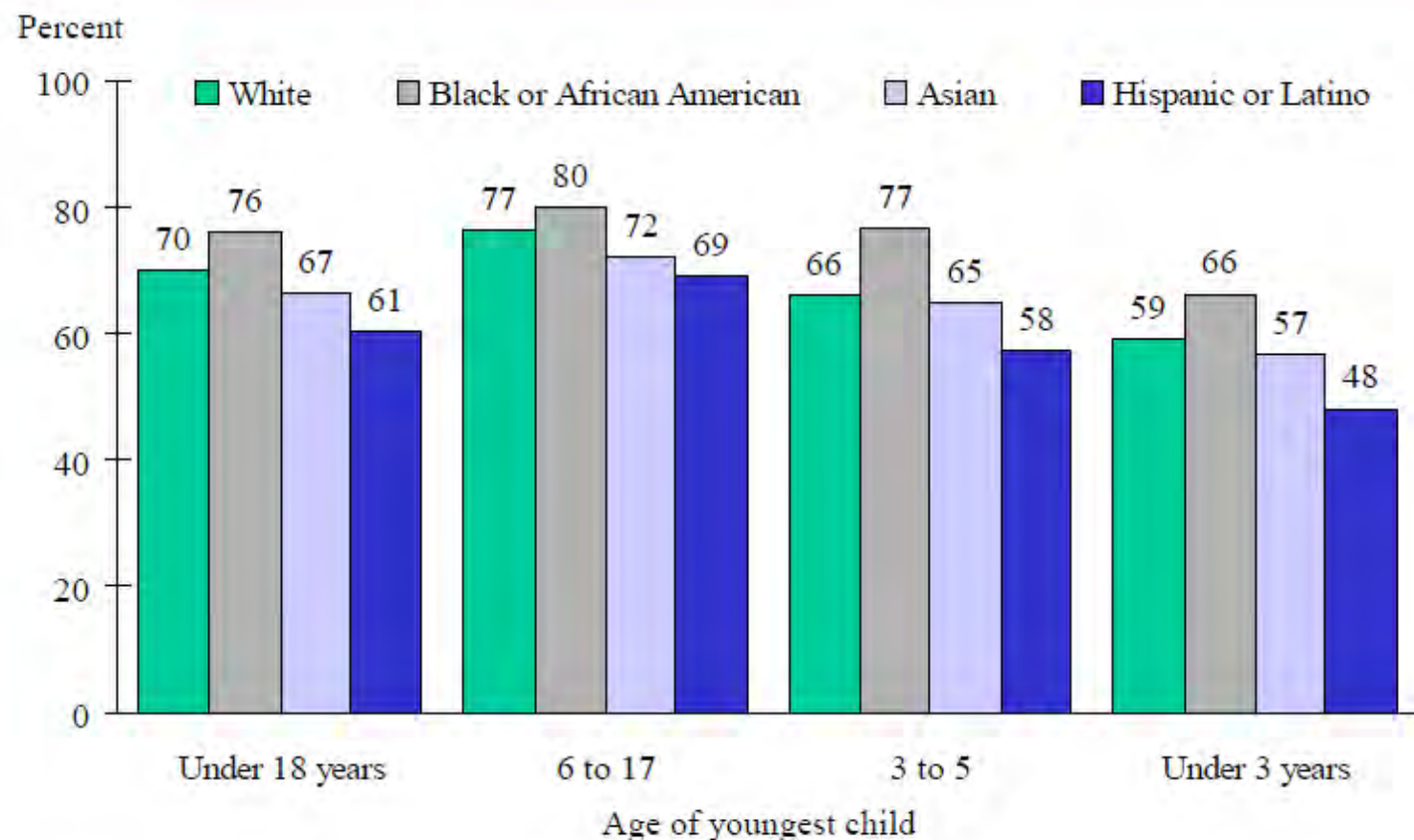
Share of mothers who are breadwinners or co-breadwinners, 1967 to 2008



Source: See Table 1.

Notes: Breadwinner mothers include single mothers who work and married mothers who earn as much as or more than their husbands. Co-breadwinners include all breadwinners as well as wives who bring home at least 25 percent of the couple's earnings. The data only include families with a mother who is between the ages of 18 and 60 and who has children under age 18 living with her.

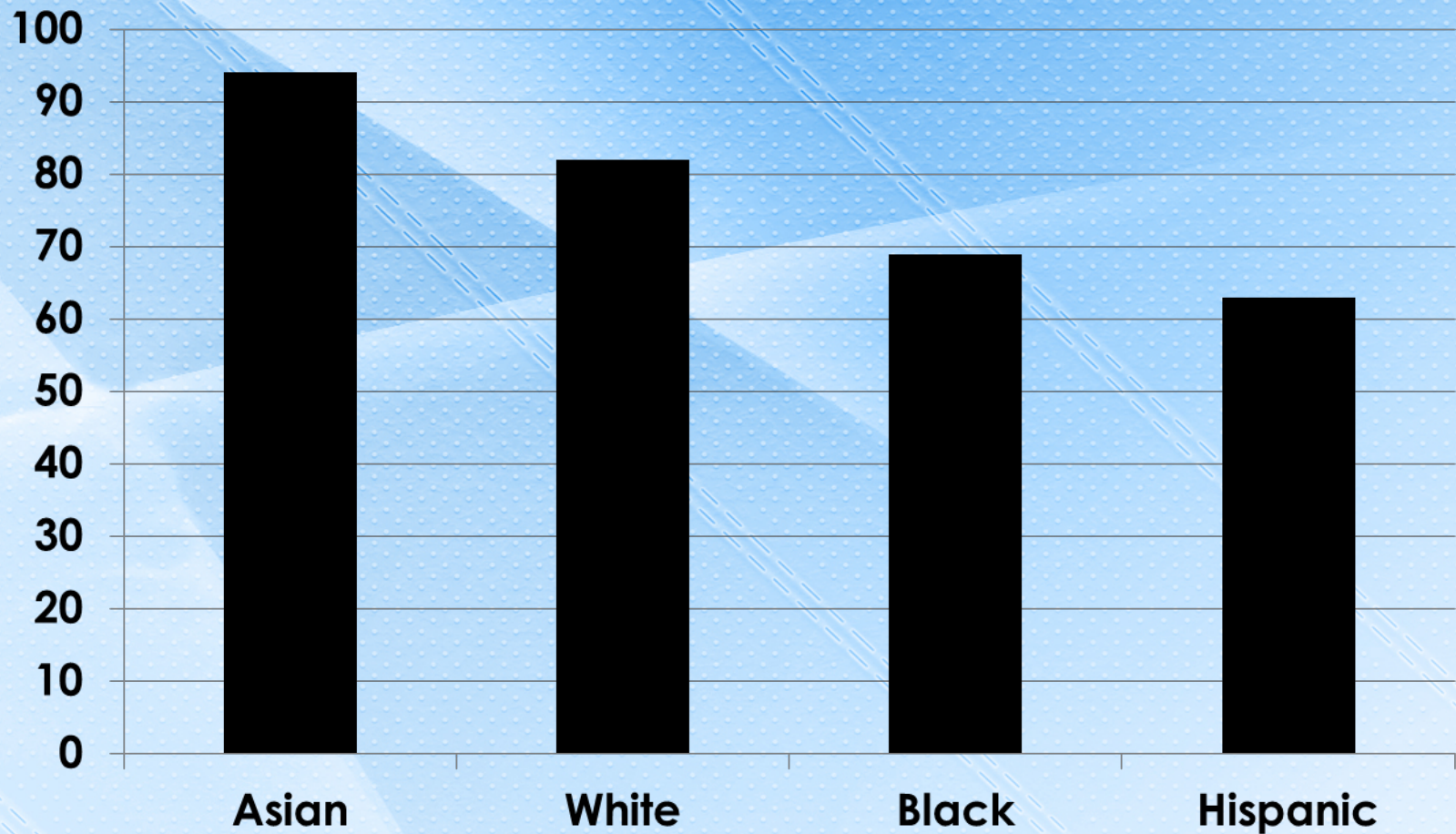
Chart 6-4. Black mothers have the highest labor force participation rates



SOURCE: Bureau of Labor Statistics



Women's 2008 Earnings as a Percent of All Men's Earnings





Factors Promoting Increased Calorie Consumption: Rise of the US Fast Food Industry

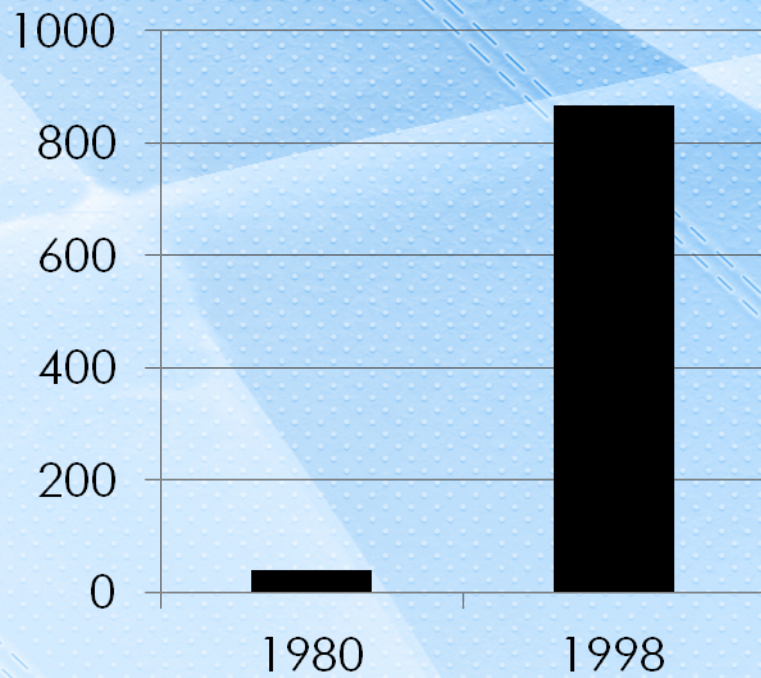
- ⊙ Number of per capita fast food restaurants doubled between 1972 and 1997 in the U.S.
- ⊙ Fast food restaurants are more common in low income and black neighborhoods
- ⊙ > 50% of US adults eat fast food ≥ 1 per week
- ⊙ 30% of US children eat fast food every day
- ⊙ Blacks are more likely to eat fast food than whites

<http://www.bls.gov/news.release/cesan.nr0.htm>; <http://www.bls.gov/mlr/1990/03/art3full.pdf>; Chou et al, J of Health Economics, 2004; Bowman et al, Pediatrics, 2003; Jeffrey et al. Int J of Behav Nut and Phys Act, 2006; Retizel et al, Am J of Public Health, 2013; Sorkin & Billimek, Health Educ Behavior, 2012

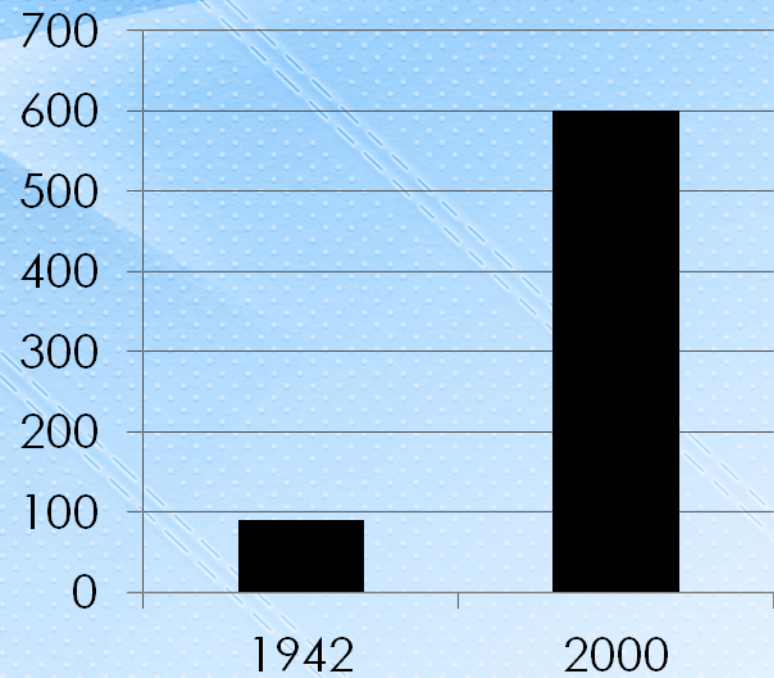


Factors Promoting Increased Calorie Consumption: Rise of the US Soda Industry

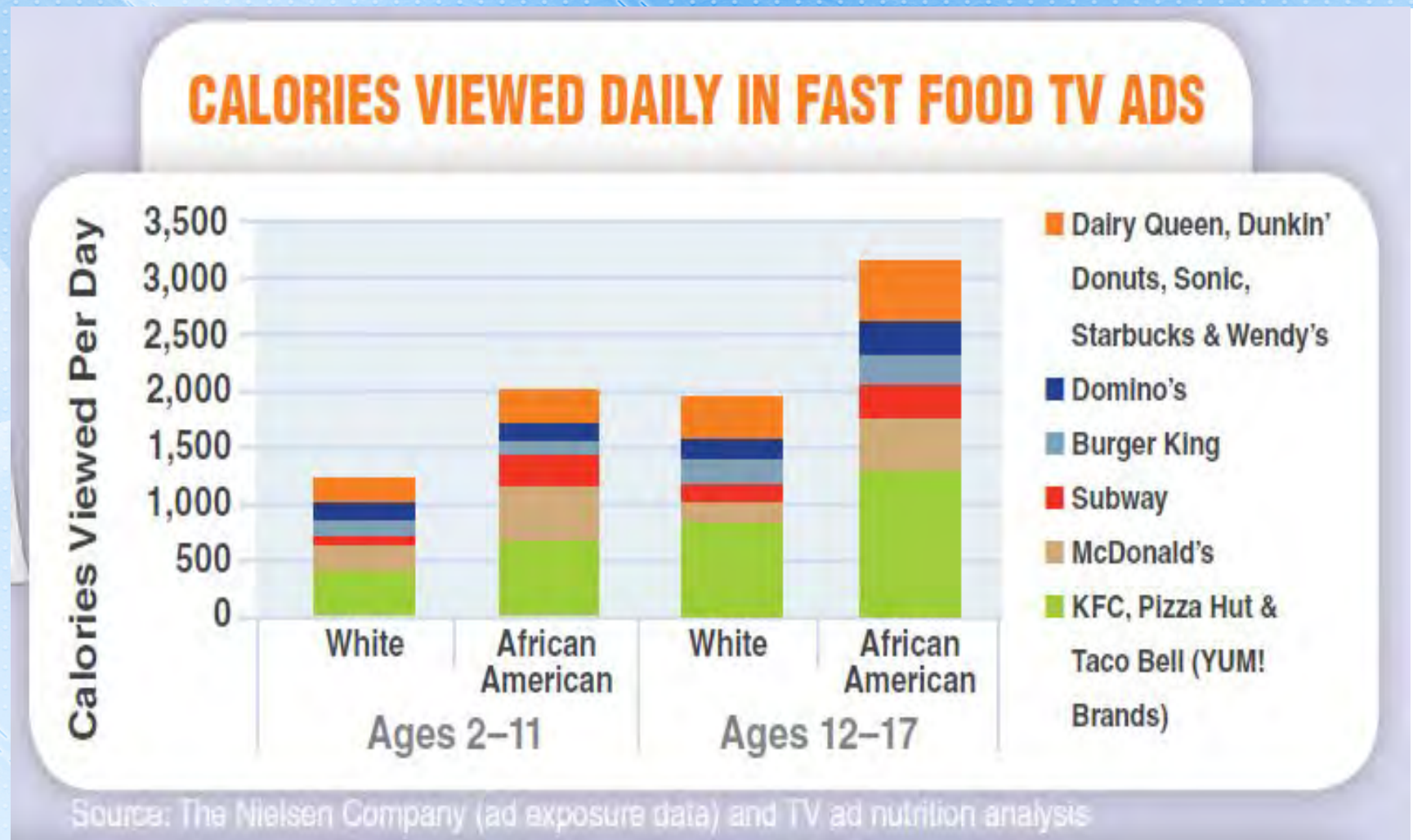
Per Capita Consumption of High Fructose Corn Syrup (lbs)



Annual Per Capita Production of 8 oz Servings of Soft Drinks



Factors Promoting Increased Calorie Consumption: Marketing Fast Food to Youth





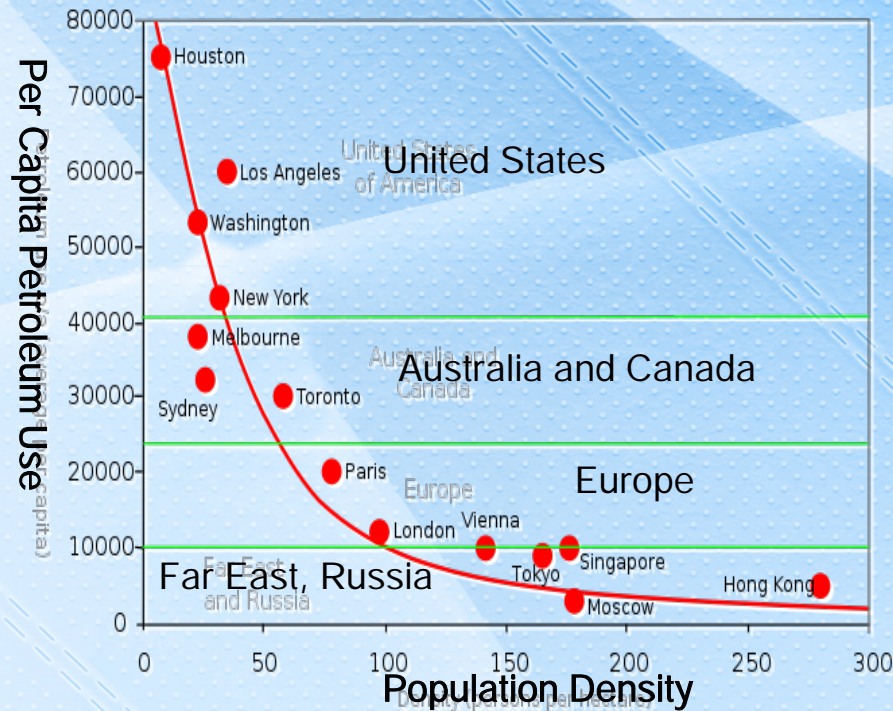
Factors Promoting Increased Calorie Consumption: US Farm Subsidies

- ◎ US farm subsidies resulted in mega farms producing so much corn and soybeans that high fructose corn syrup, hydrogenated fats from soybeans, and corn-based feed is kept artificially low, resulting in low prices for fast food, corn-fed beef and pork, and soda
- ◎ No such subsidies exist for fresh fruits and vegetables which are produced in much lower quantities at higher cost to the public

Factors Associated with Decreased Physical Activity: Suburban Living

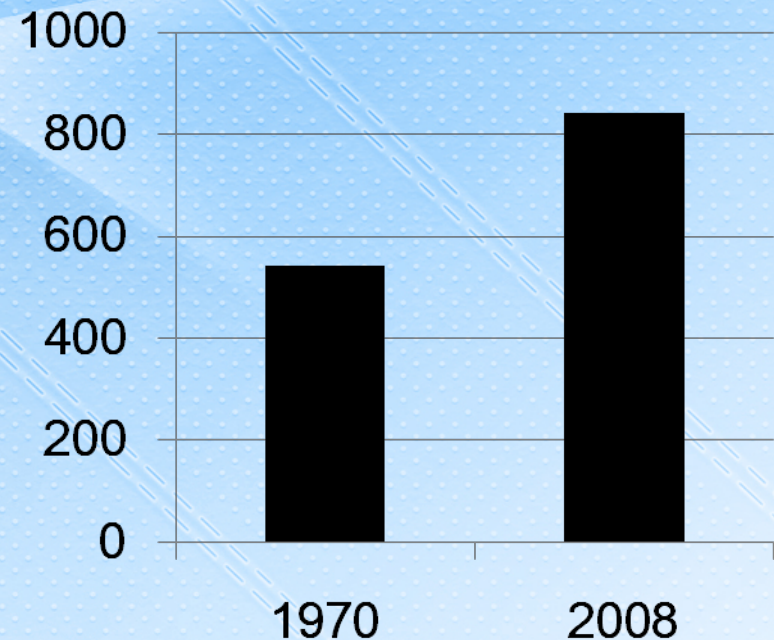
Relationship between Transport and Land Use

A commonly used study of 32 cities by Newman & Kenworthy in 1989 concluded that there was a strong link between urban development densities and petroleum consumption.



Urban Task Force Partnership: Toward an Urban Renaissance, 1999
Annual petroleum use per capita adjusted to US \$1 (1990)
 After Andrew Wright Associates, final section taken from 'Towards an Urban Renaissance',
 © 1999

US Vehicles per 1000 people

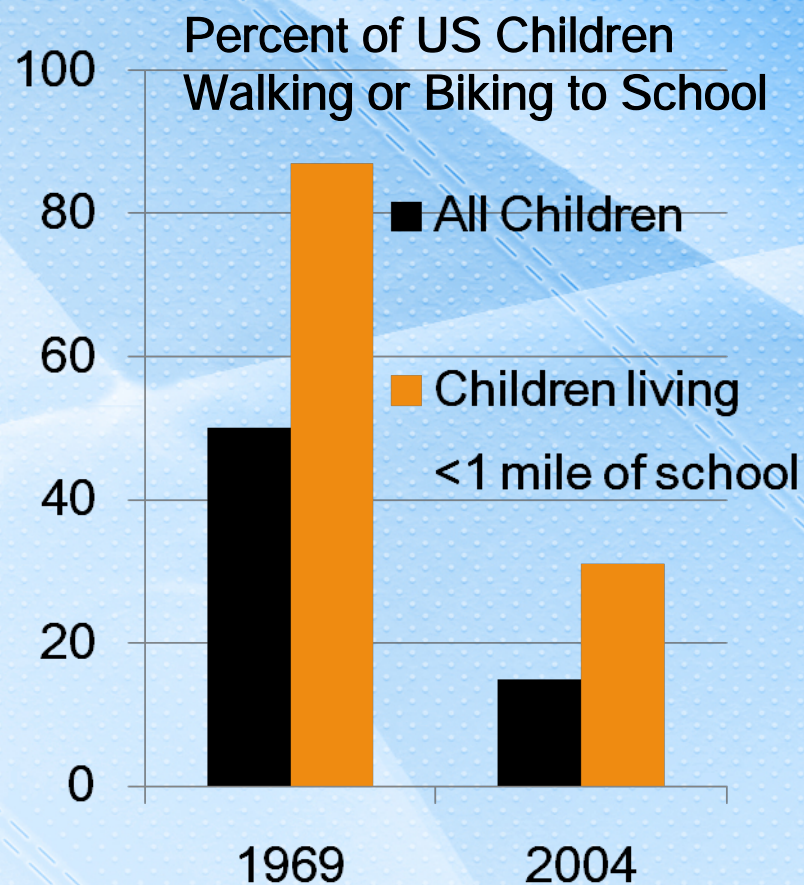


US Dept of Transportation, 2008



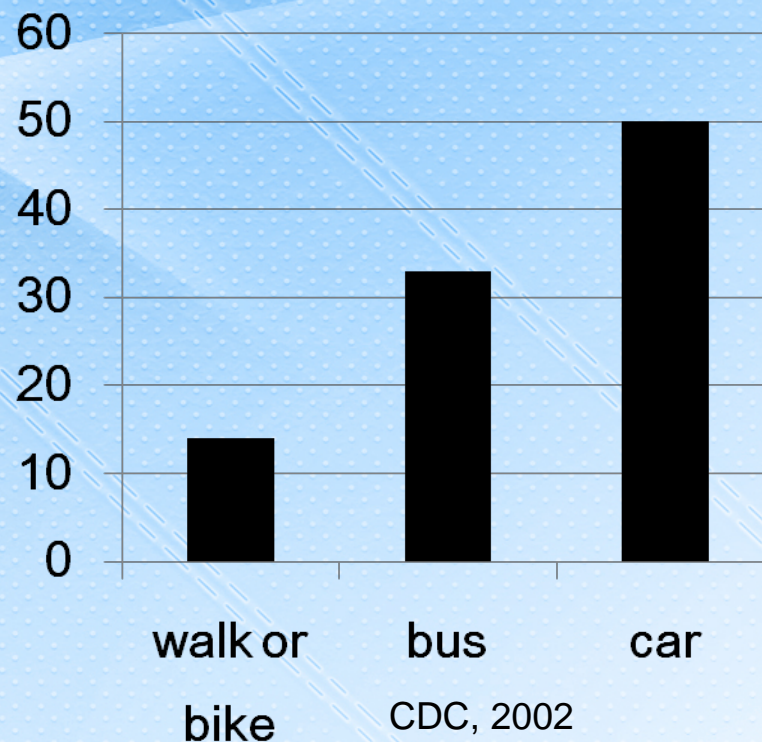
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Factors Associated with Decreased Physical Activity: School Transportation



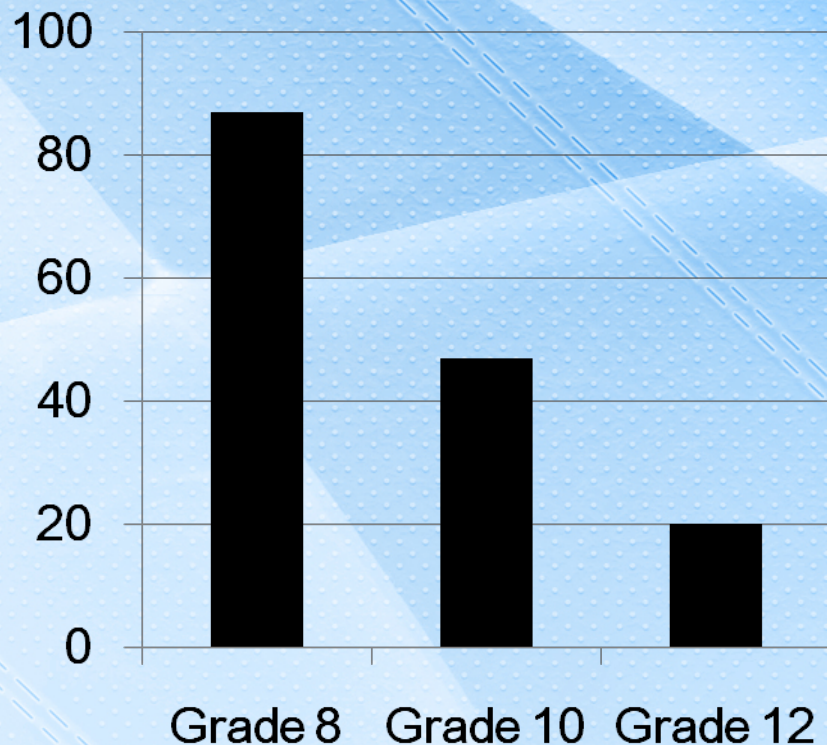
CDC, 2005

US School Transportation (1999): Percent of Children

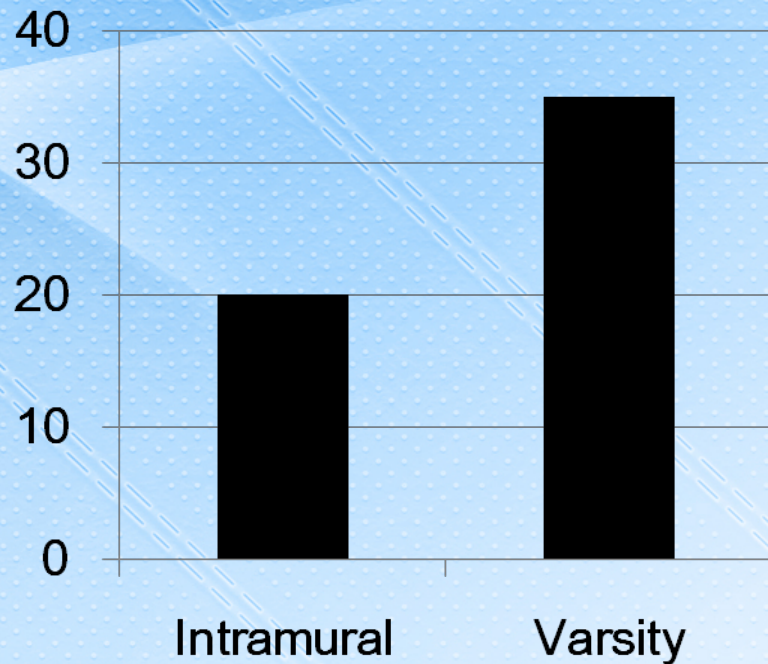


Decreased Physical Activity at School

**Percent of US Schools
Requiring Physical
Education by Grade**



**Percent of US High
School Students
Participating in School
Sports**





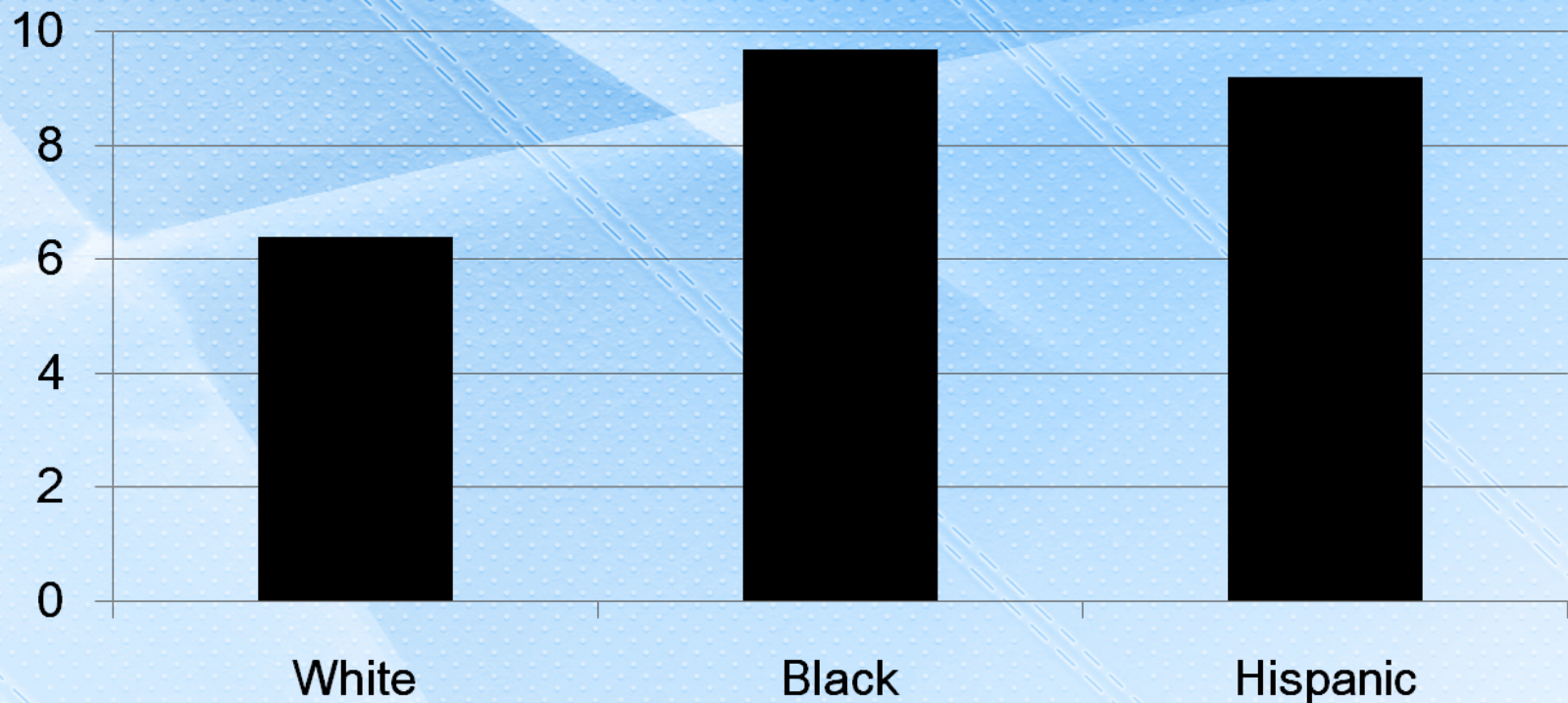
Factors Associated with Decreased Physical Activity: US Policies

- ◎ US Department of Transportation spends most of its money on highways
- ◎ Traffic concerns are one of the primary reasons parents do not allow their children to walk or bike to school
- ◎ Mortgage tax deductions spurred suburban home ownership
- ◎ No Child Left Behind policy resulted in decreased access to physical education and recess as schools focus on high stakes testing



Factors Associated with Decreased Physical Activity: Escalating Leisure Time Media Use

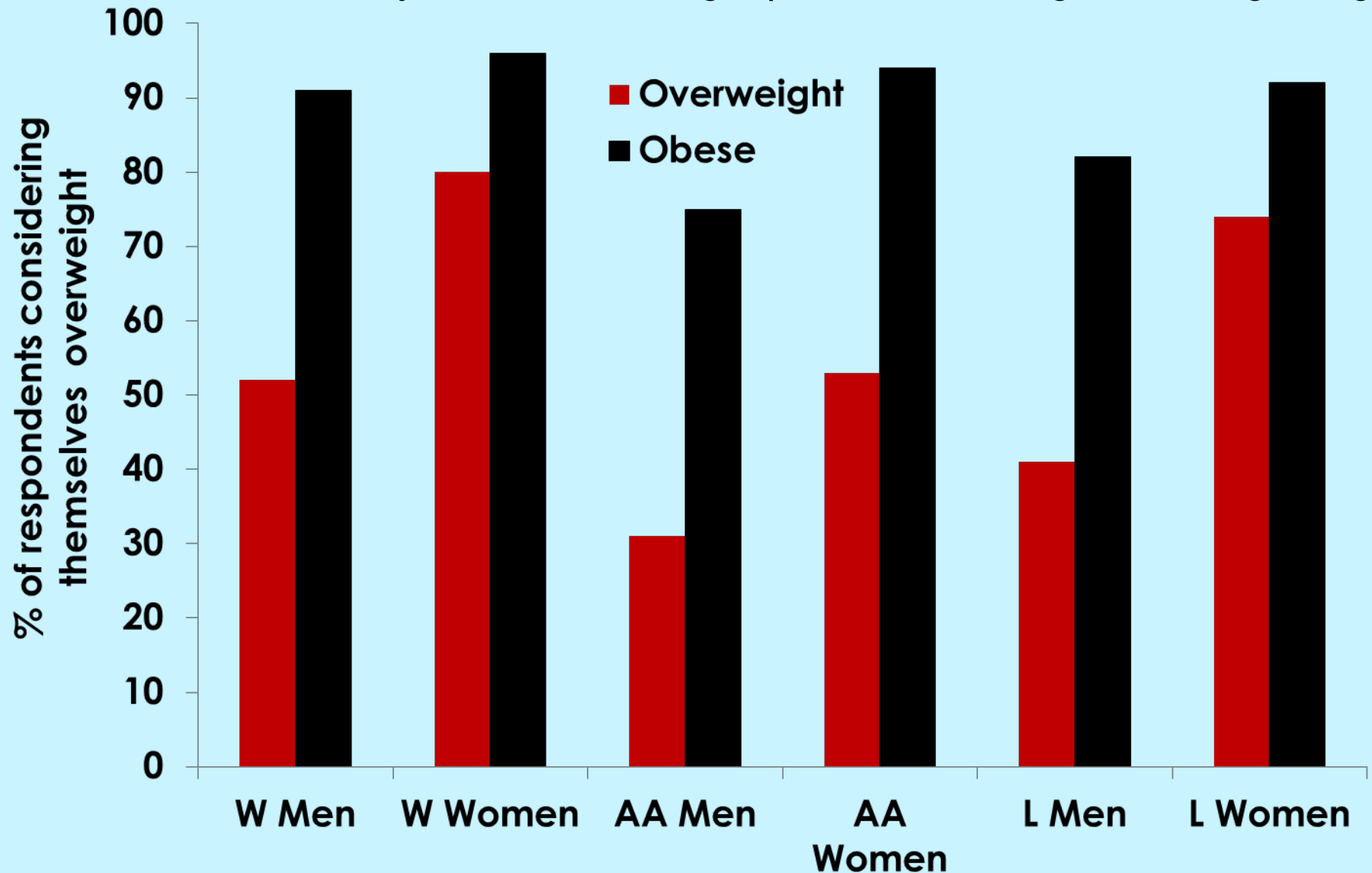
Hours Per Day Among 8-18 Year Olds





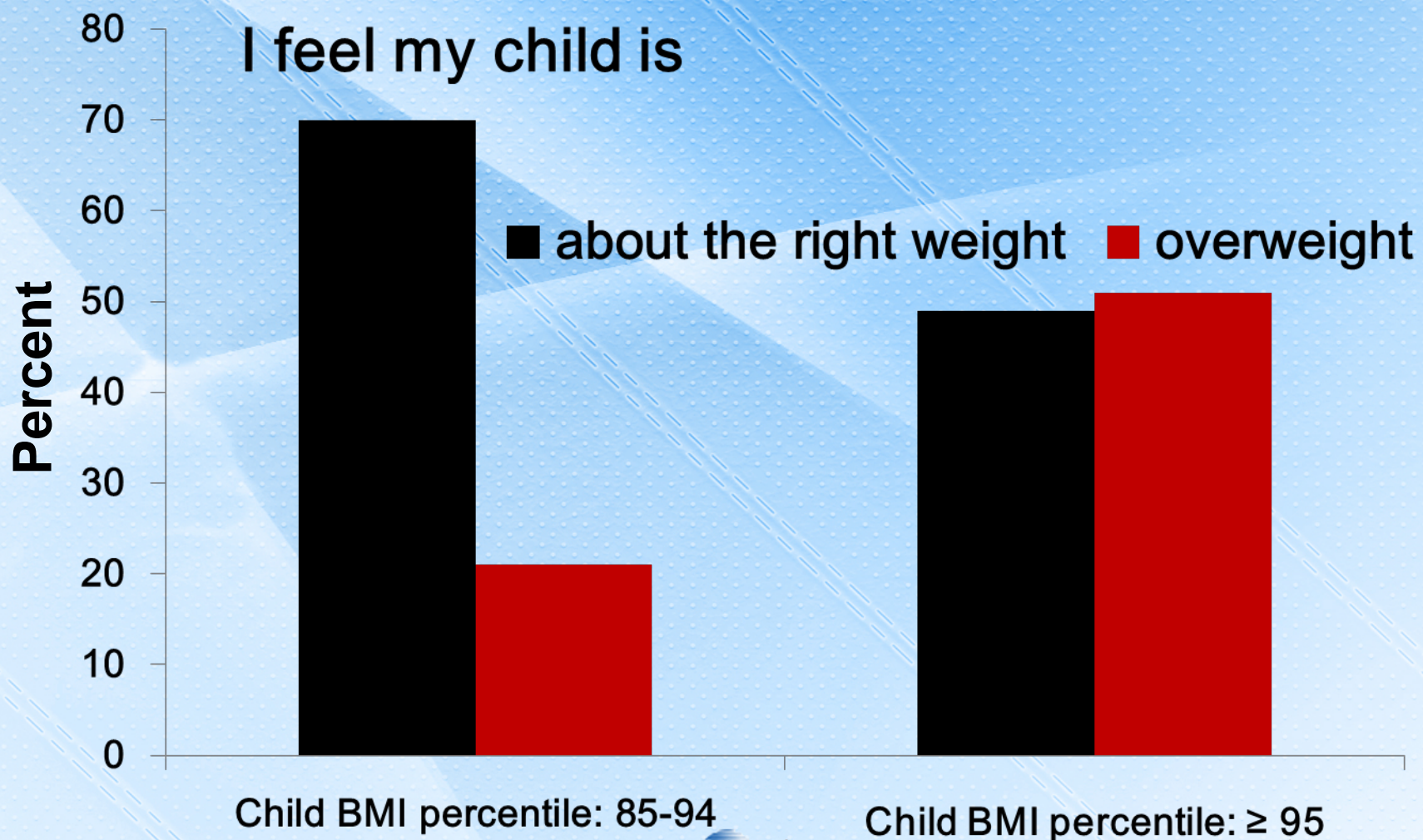
Adults Often Fail to Recognize They Are Overweight

I consider myself to be overweight (versus underweight or average weight)



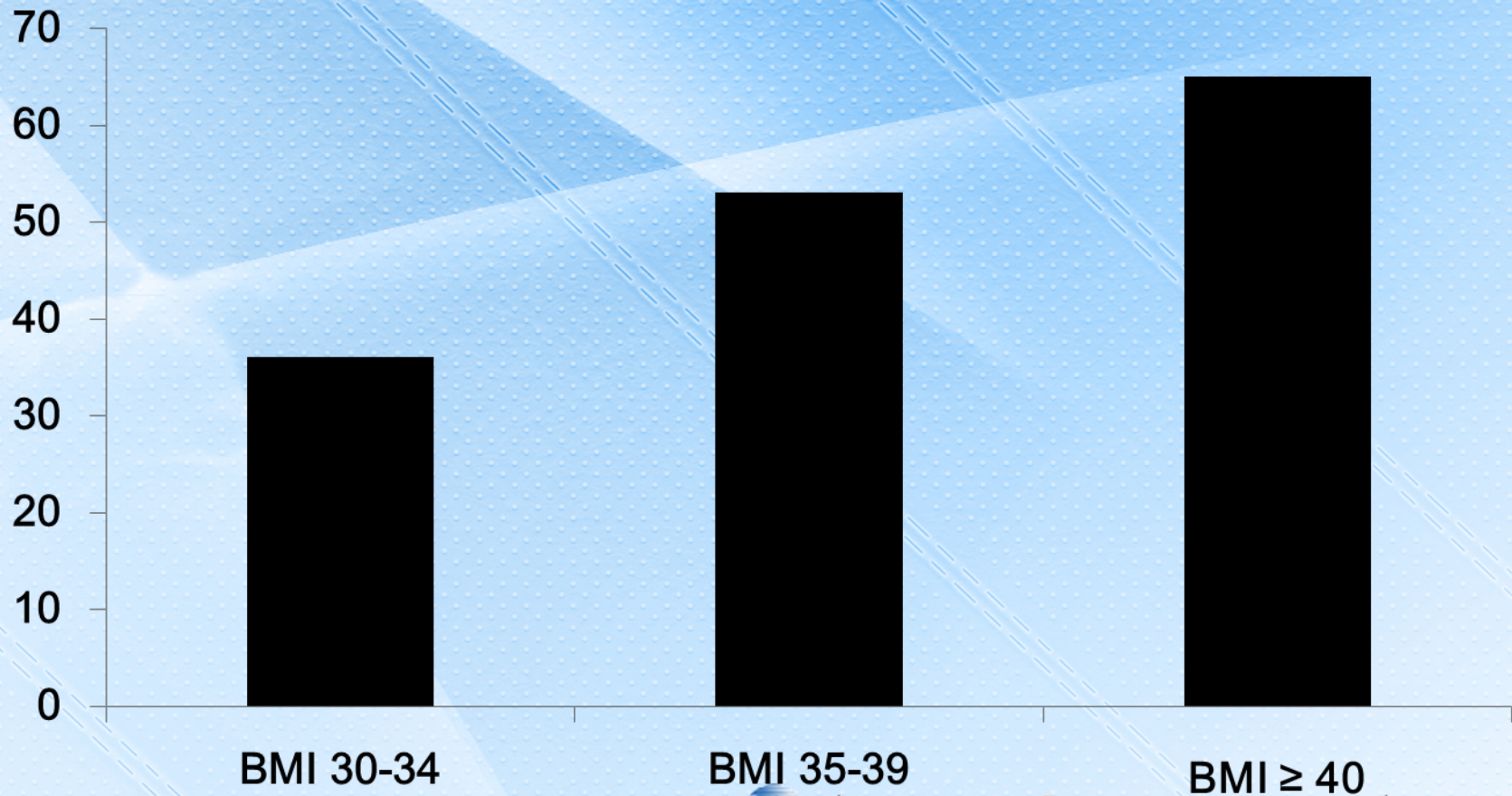


Many Parents Fail to Recognize Their Child is Overweight



Many Health Providers Fail to Monitor Adult BMI

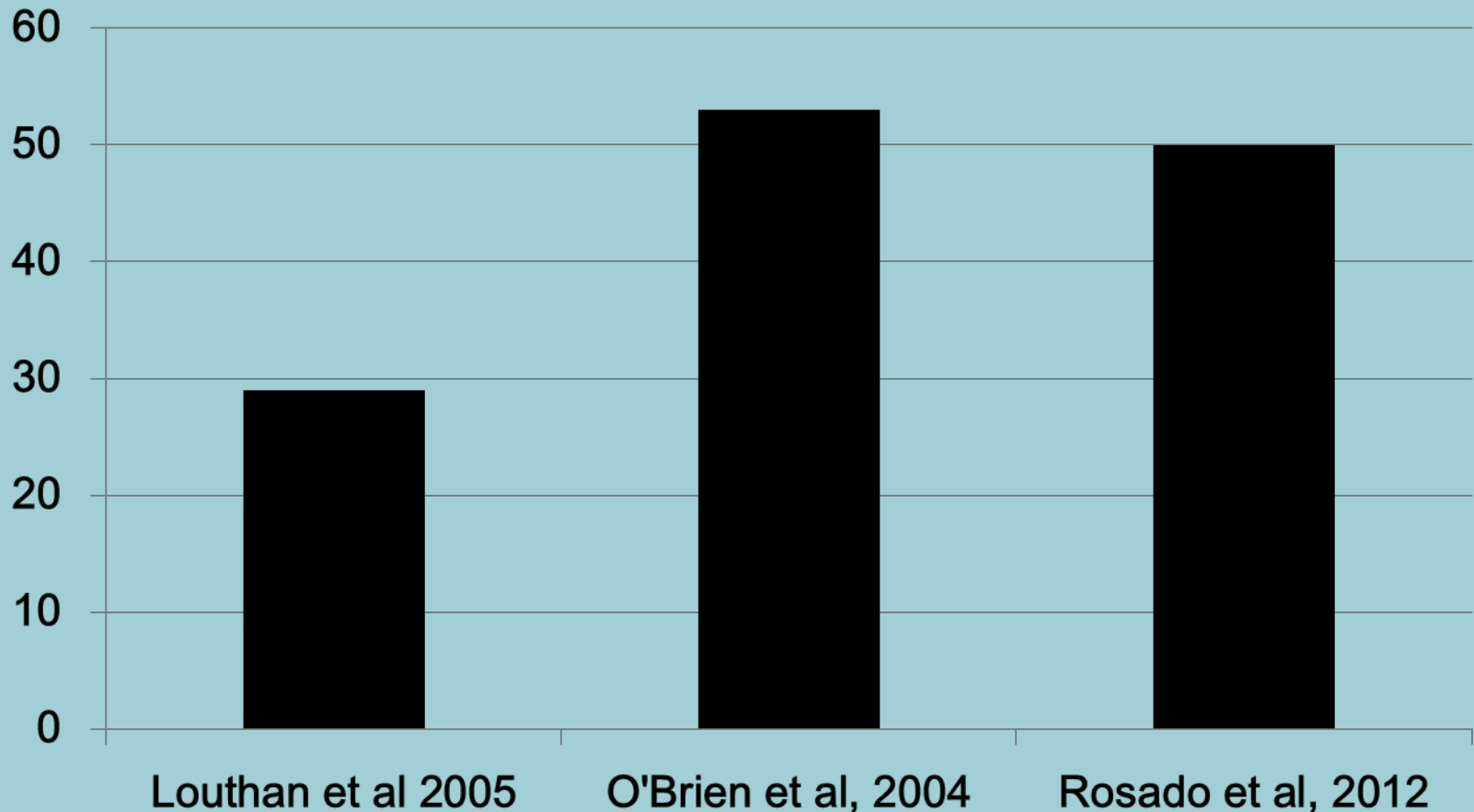
% of obese adults who reported their health care provider advised them to lose weight



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Many Health Providers Fail to Monitor Child BMI

% of obese children identified by provider in a well-child visit



How Has Psychology Responded?

Traditional Mental Health Response Focused on the Individual

- Psychological impact of obesity: Stigma, discrimination, bullying
- Psychological impact on obesity: Stress, depression
- Mental health resilience as a strength





How Should Psychology Respond?

Psychology Must Expand its Response Beyond the Mental Health of the Individual and Embrace the Social-Ecological Model

- Individual – developmental issues, life style behaviors in addition to mental health concerns
- Family - cross generational effects on biology, values, beliefs, perceptions, behaviors
- Systems – schools and health care and the research enterprise
- Communities – religious, social and work
- Policy: Local, State and Federal



How Should Psychology Respond?

◎ An Expanded Response Using the Social-Ecological Model

- Requires us to define the characteristics of a health promoting –versus an obesogenic –environment
- Requires us to focus on prevention as well as intervention
- Requires us to abandon the “personal choice” explanation of obesity while promoting agency at all levels
- Requires communication and involvement at all levels



How Should Psychology Respond?

- ◎ An Expanded Response Requires Collaboration and Partnerships
 - ◎ Interdisciplinary research teams
 - ◎ Community leaders and decision makers
 - ◎ Systems analysis and buy in
 - ◎ Partners in advocacy at local, state and federal level
 - ◎ Collaboration and support among ourselves



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