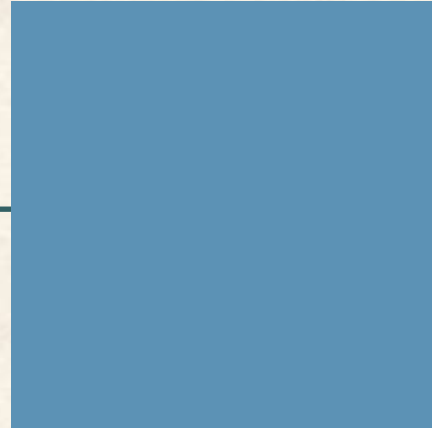


You're In the Army Now:
Modification of Lifestyle Behavior for
Sustainable Stroke Risk Reduction
5th Annual NECC Summit



Anne McHugh, MS
Director, Chronic Disease Prevention and Control Division
Boston Public Health Commission

October 29, 2010

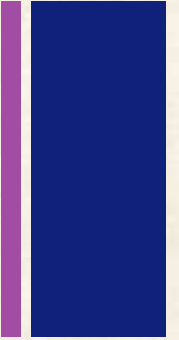
Presenter Disclosure Information

- *Name:* Anne McHugh, MS
- *Title:* You're In the Army Now: Modification of Lifestyle Behavior for Sustainable Stroke Risk Reduction
- *Financial Disclosure:* No Relevant Financial Relationship Exists

Learning Objectives

What I am and am not going to talk about

- Not going to talk about programs to change individual lifestyles
- Major modifiable risk factors for stroke
- Population trends in these factors, with emphasis on obesity
- Underlying causes of these trends
- Emerging best practices in addressing underlying causes
- How you and your organizations can play a role



Modifiable Risk Factors for Stroke

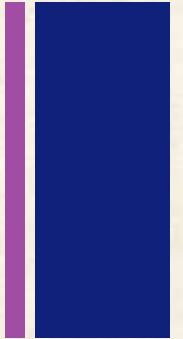
- Hypertension
- High cholesterol
- Tobacco use and exposure
- Diabetes
- Overweight
- Cardiovascular Disease
- Excessive alcohol use and illicit drug use

Modifiable Risk Factors for Stroke

- Consuming too many calories
- Consuming too much sodium, fat, and sugar
- Sedentary Lifestyles
- Smoking
- Second hand smoke exposure at home, work, and in public places
- Stress

The underlying causes of > 1/3 U.S. deaths are tobacco use/exposure (~18%) and poor diet/physical inactivity (~17%)

Trends in Stroke Risk Factors



■ Tobacco Use and Exposure

- Significant decreases, but downward trend has leveled off

■ Obesity

- Dramatic increase over past 30 years
- Significant socio-economic and racial/ethnic disparities

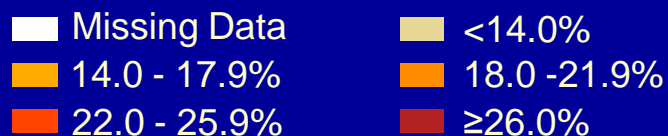
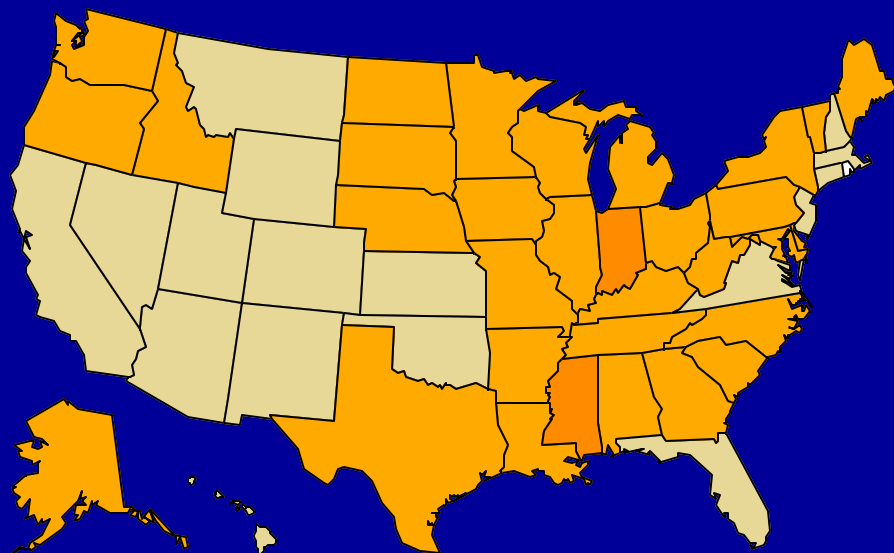
■ Stress

- Evidence of relationship of stress/hormonal changes to obesity
- For some health issues (LBW) evidence that stress of racism is direct contributor to unequal outcomes

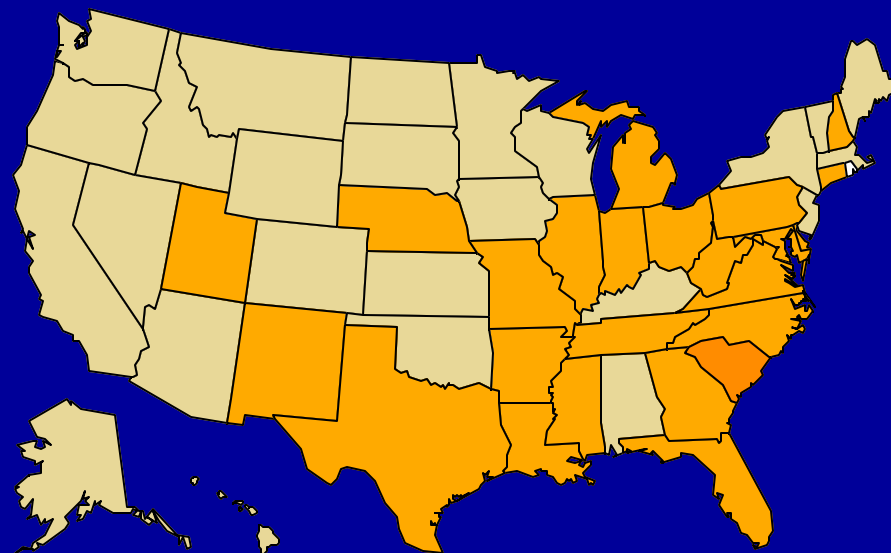
Age-adjusted Percentage of U.S. Adults Who Were Obese or Who Had Diagnosed Diabetes

1994

Obesity (BMI \geq 30 kg/m²)



Diabetes



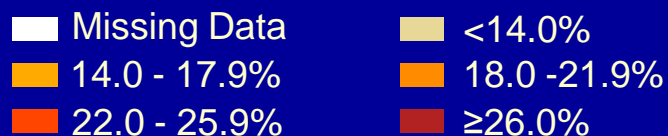
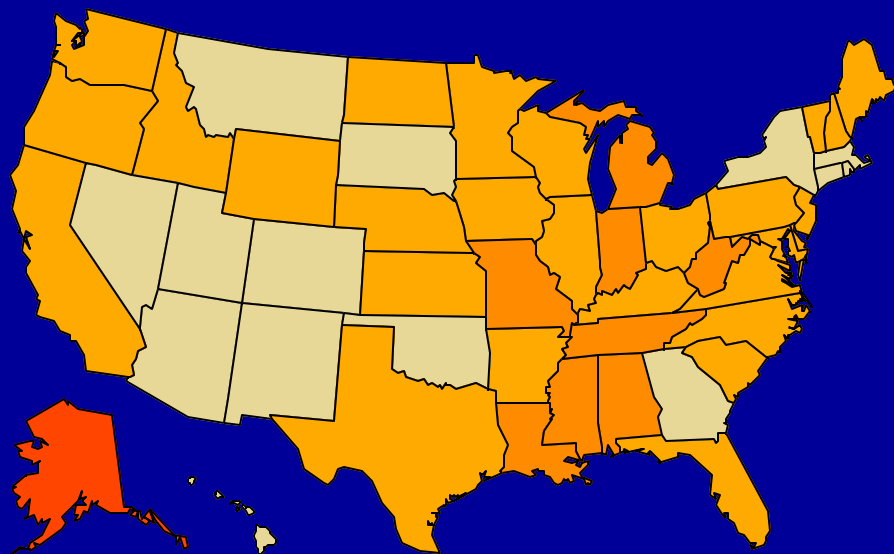
CDC's Division of Diabetes Translation. National Diabetes Surveillance System available at <http://www.cdc.gov/diabetes/statistics>



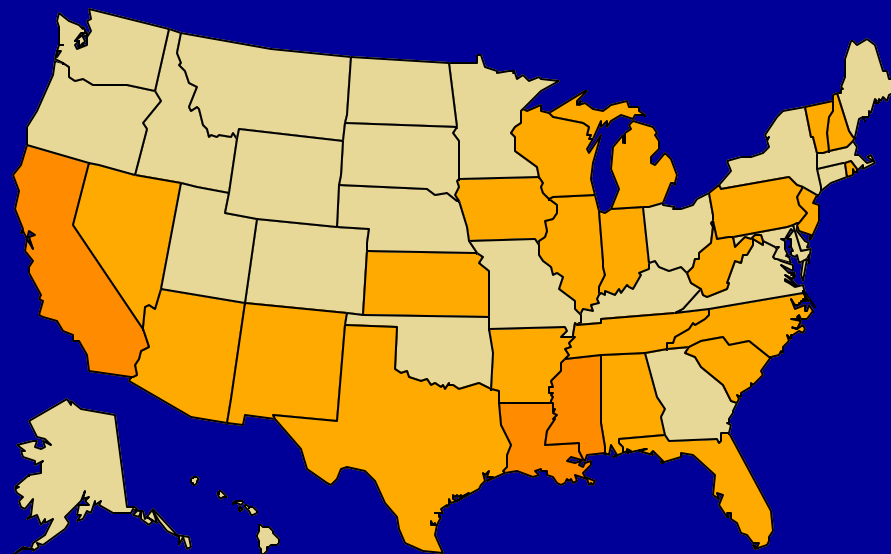
Age-adjusted Percentage of U.S. Adults Who Were Obese or Who Had Diagnosed Diabetes

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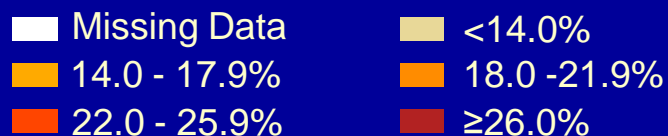
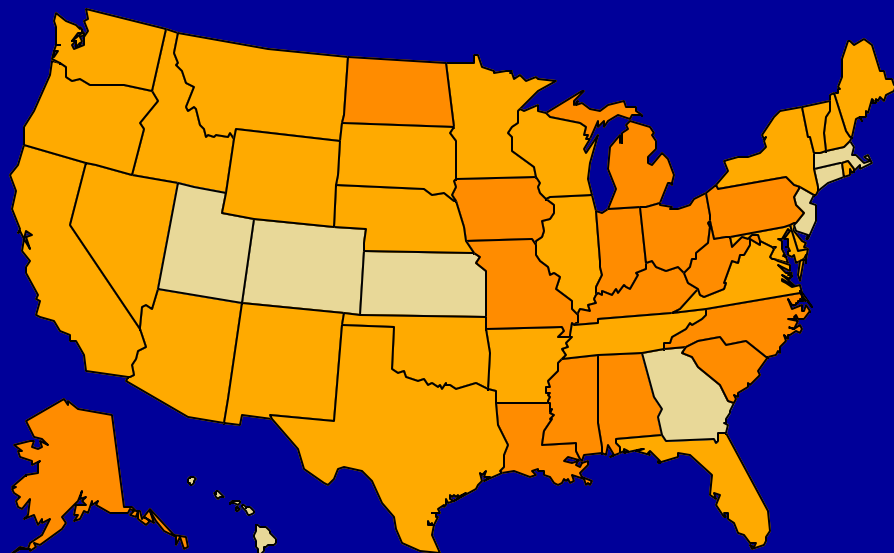
CDC's Division of Diabetes Translation. National Diabetes Surveillance System available at <http://www.cdc.gov/diabetes/statistics>



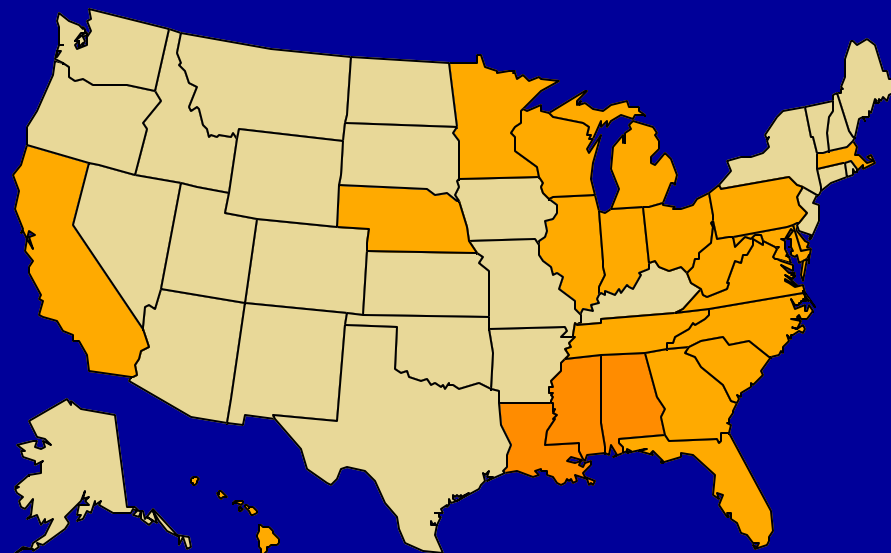
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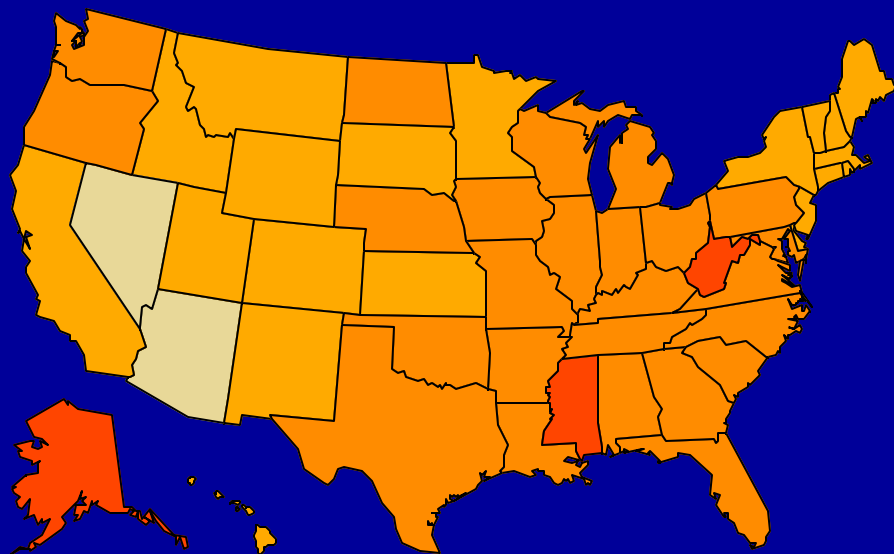
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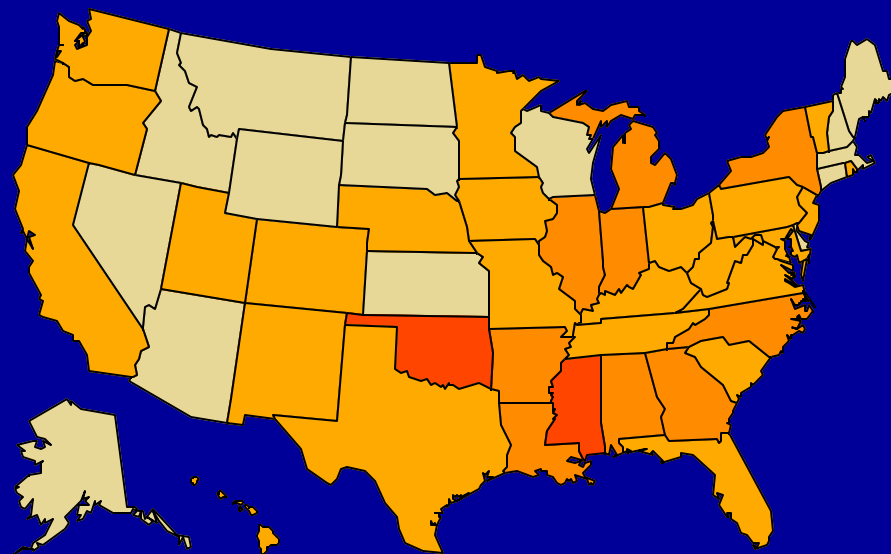
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Obesity (BMI \geq 30 kg/m²)



Diabetes



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22.0 - 25.9%

<14.0%
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Missing data
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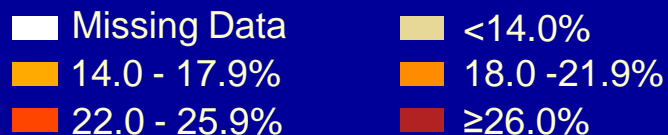
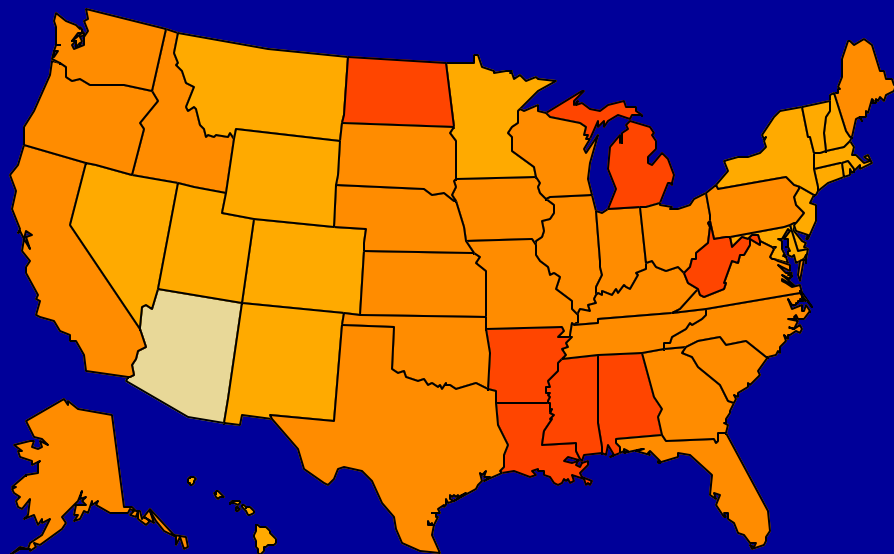
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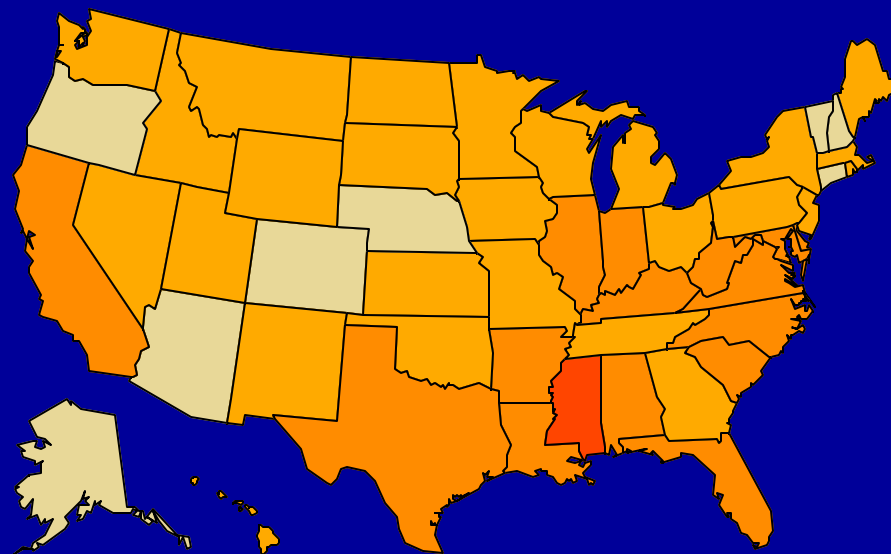
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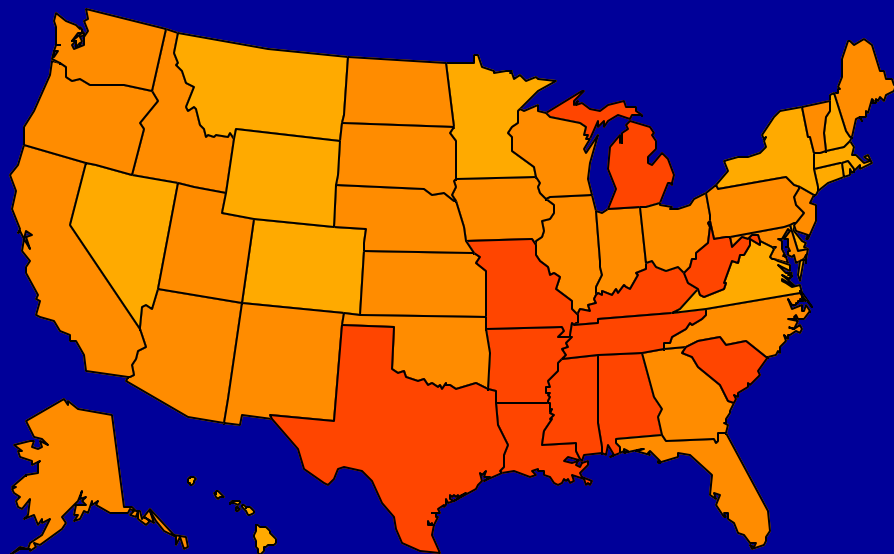
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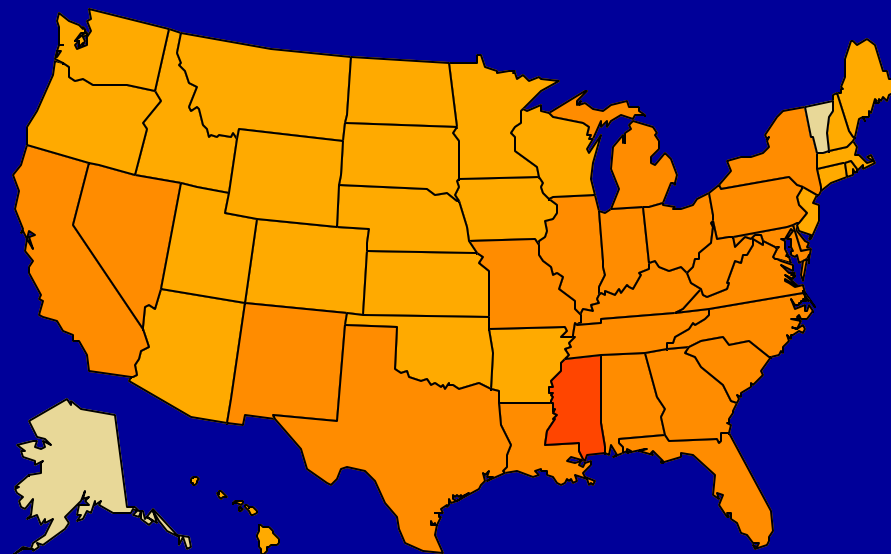
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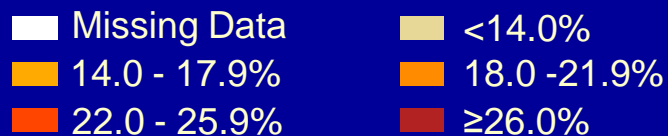
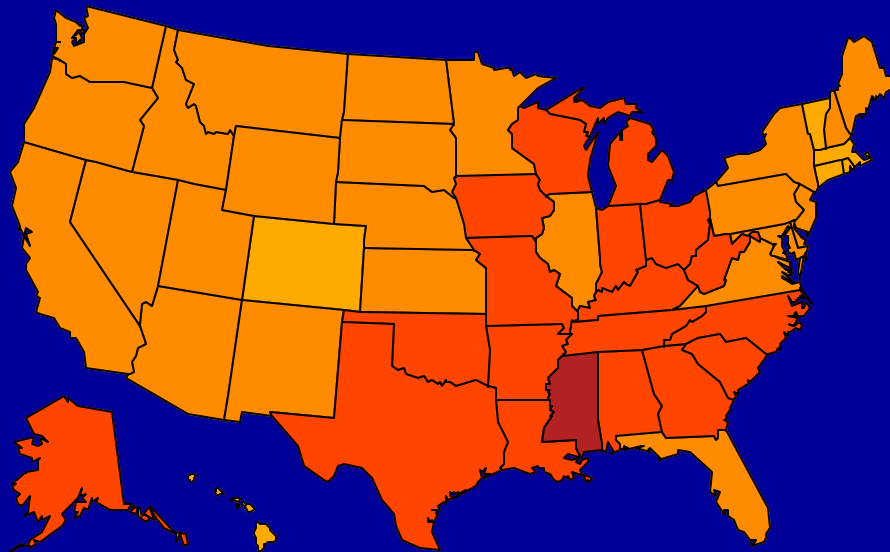
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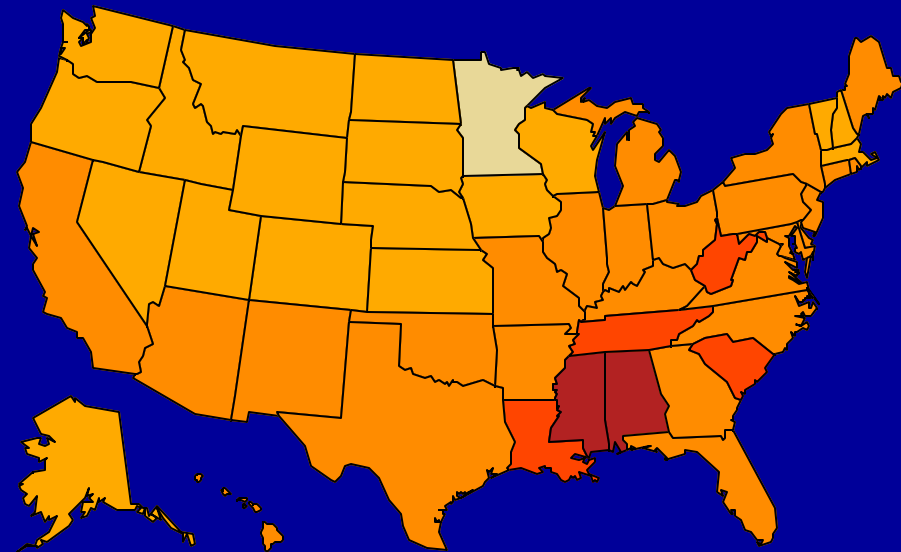
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Diabetes



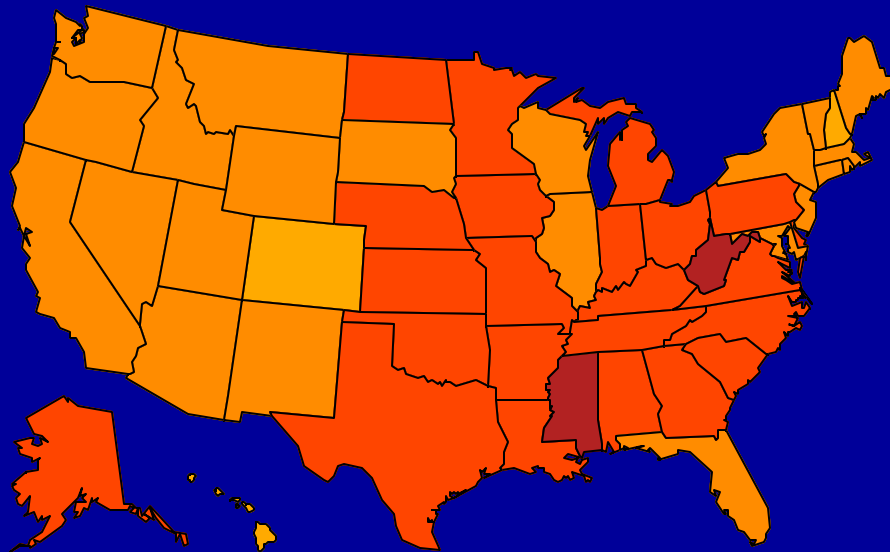
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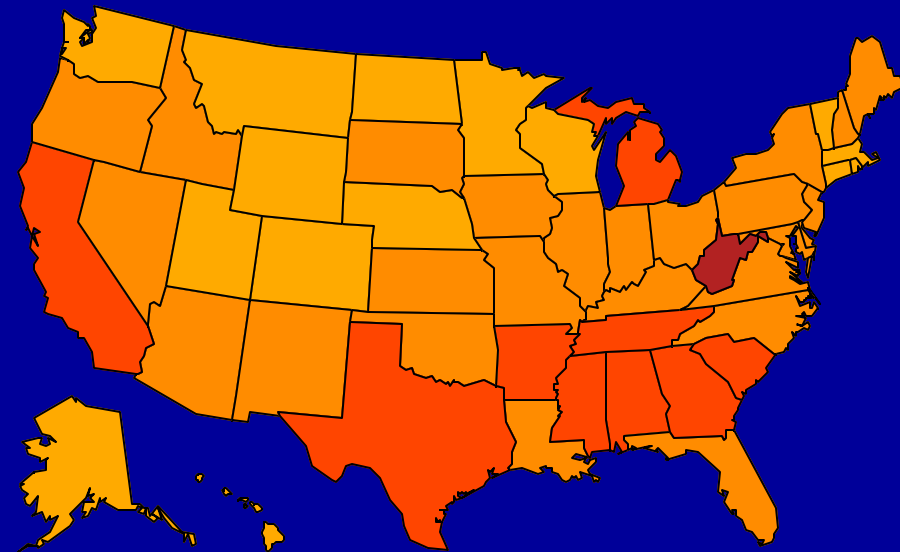
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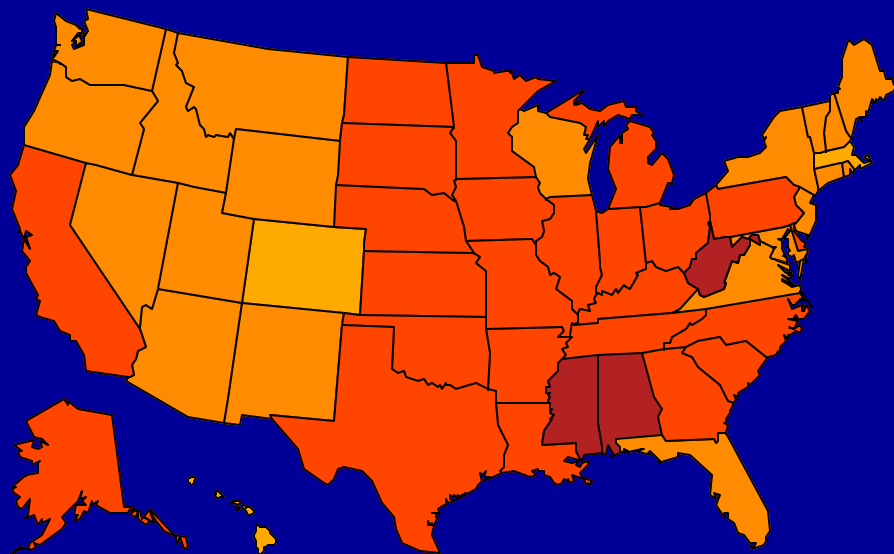
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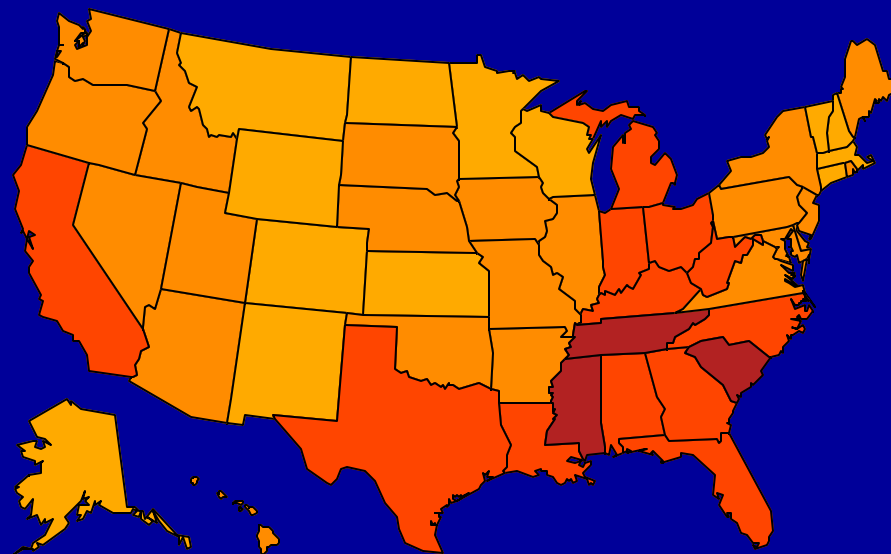
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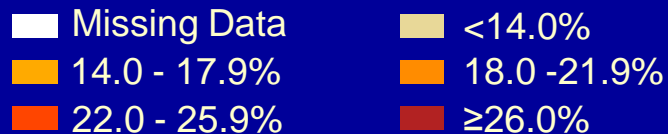
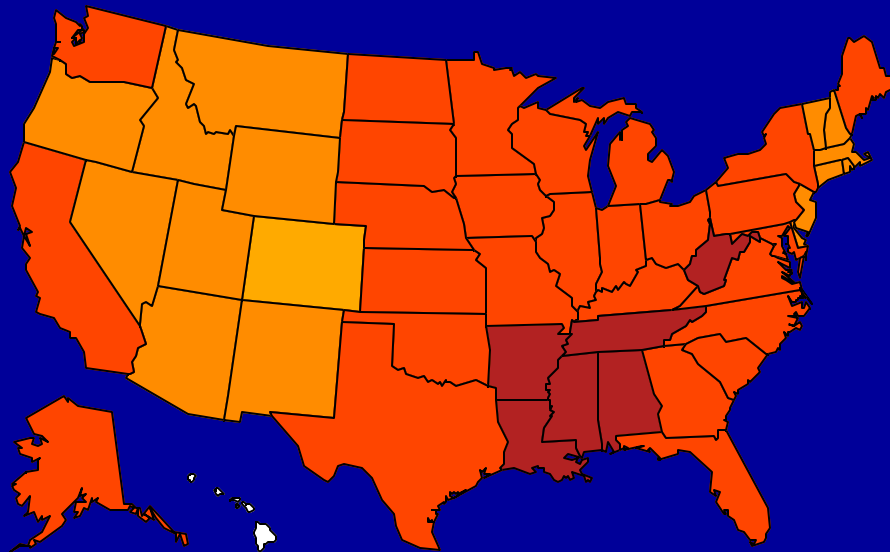
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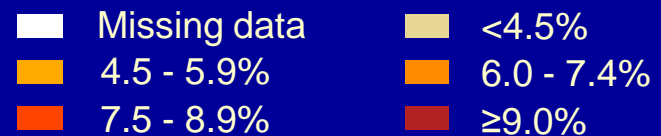
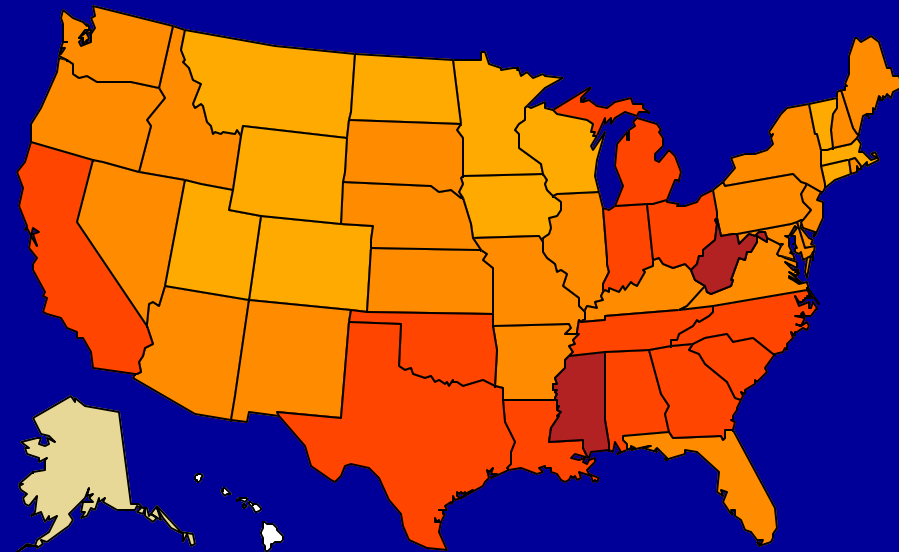
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Diabetes



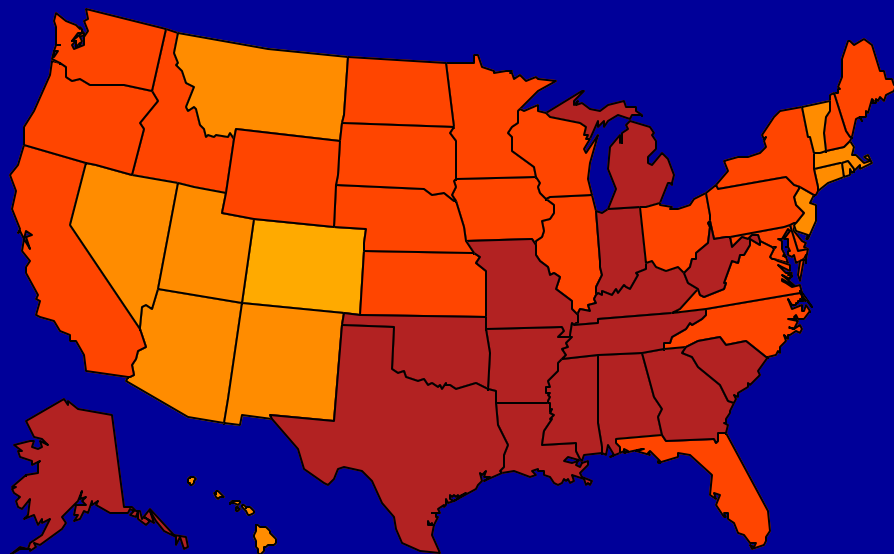
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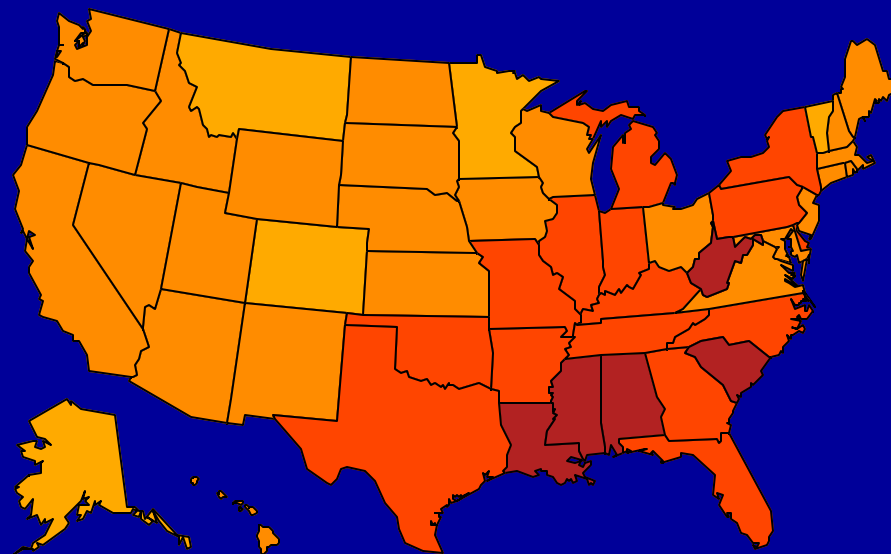
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Diabetes



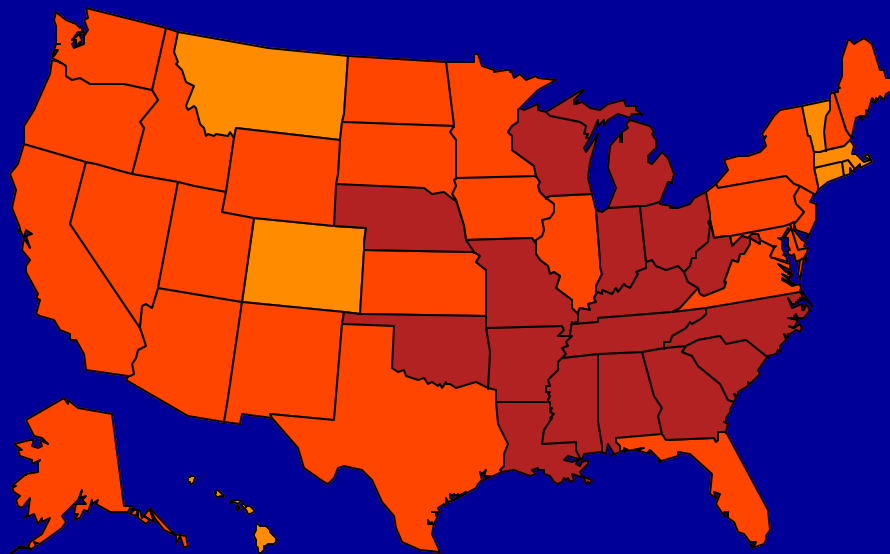
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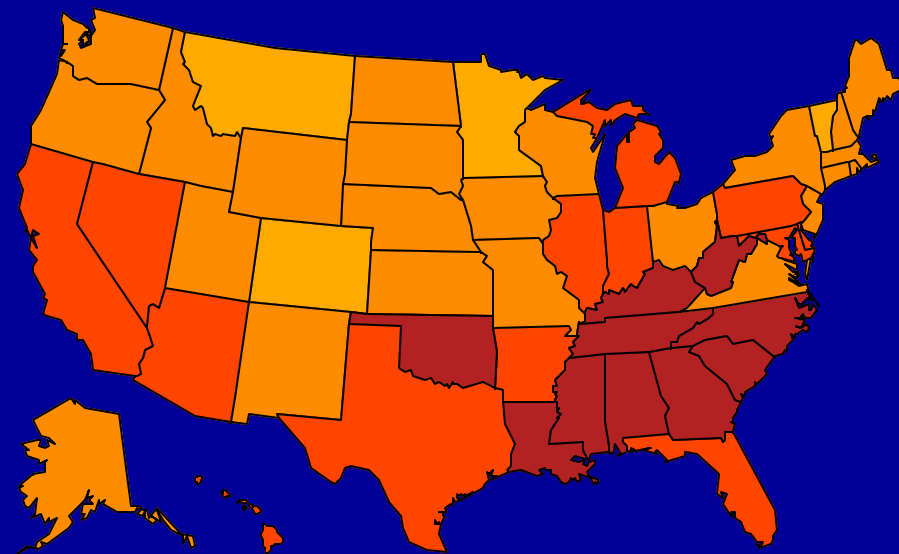
Age-adjusted Percentage of U.S. Adults Who Were Obese or Who Had Diagnosed Diabetes

2006

Obesity (BMI \geq 30 kg/m²)



Diabetes



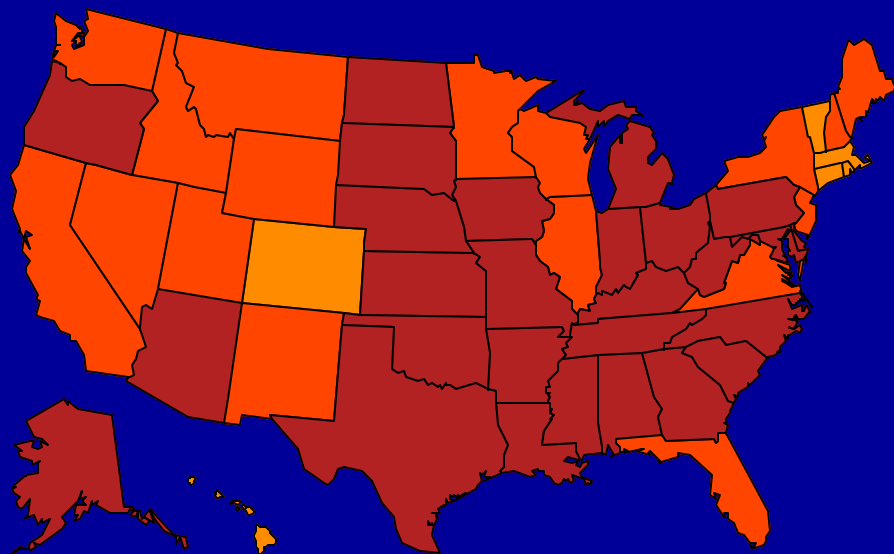
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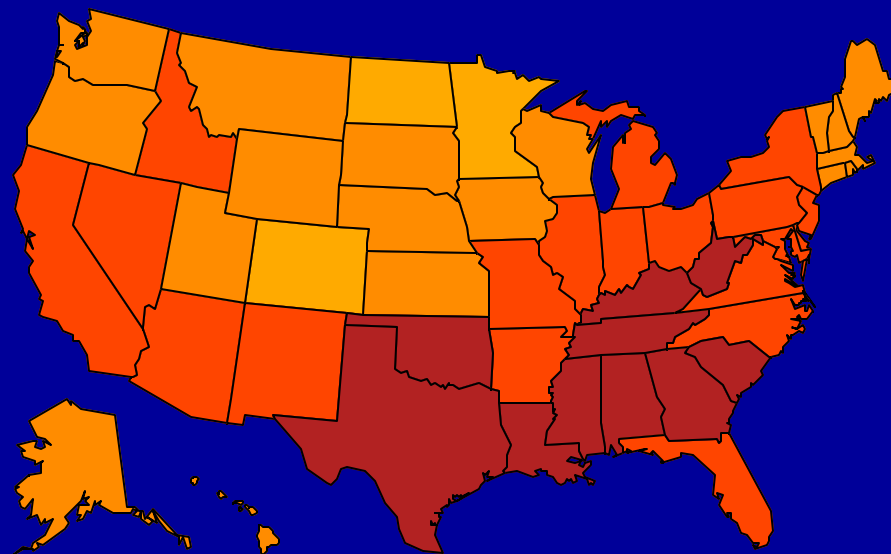
Age-adjusted Percentage of U.S. Adults Who Were Obese or Who Had Diagnosed Diabetes

2007

Obesity (BMI \geq 30 kg/m²)



Diabetes



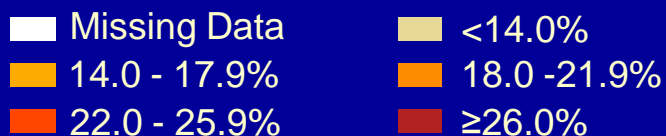
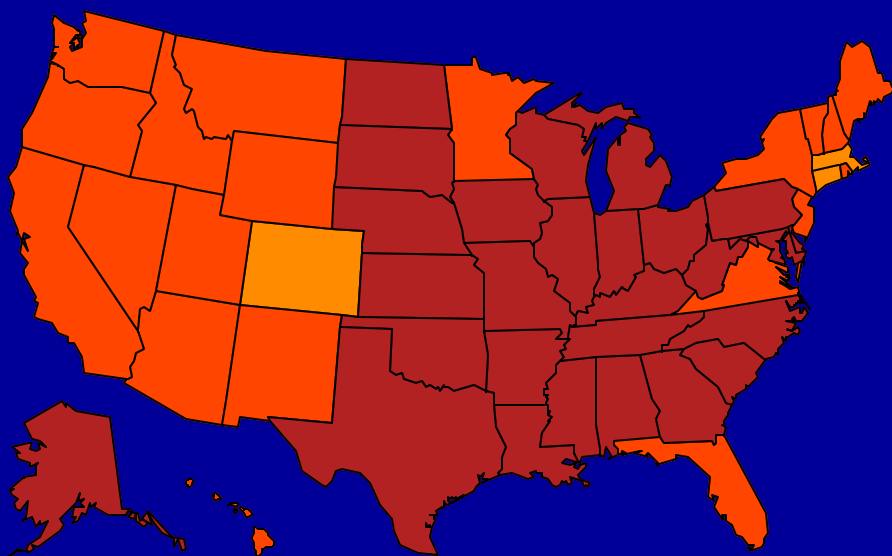
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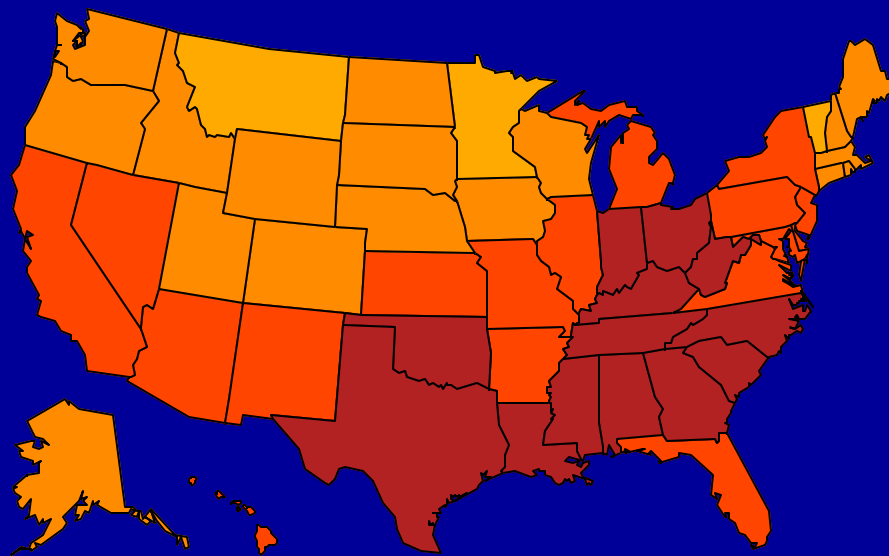
Age-adjusted Percentage of U.S. Adults Who Were Obese or Who Had Diagnosed Diabetes

2008

Obesity (BMI \geq 30 kg/m²)



Diabetes



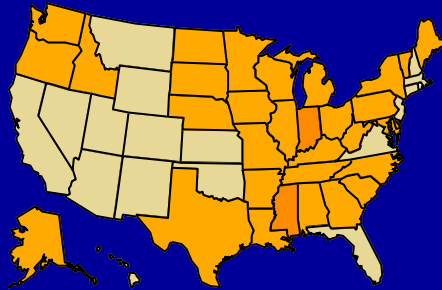
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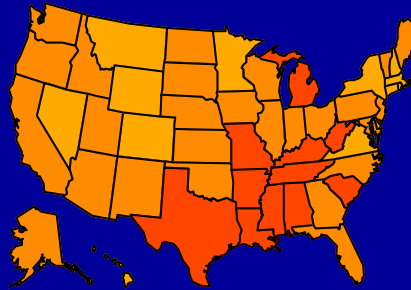
Age-adjusted Percentage of U.S. Adults Who Were Obese or Who Had Diagnosed Diabetes

Obesity (BMI ≥ 30 kg/m²)

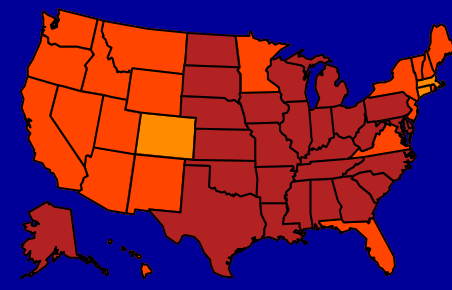
1994



2000

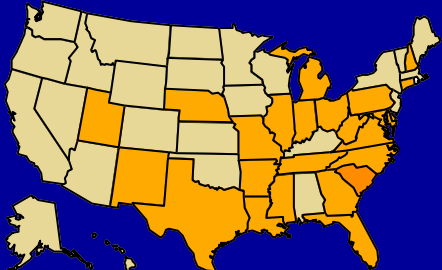


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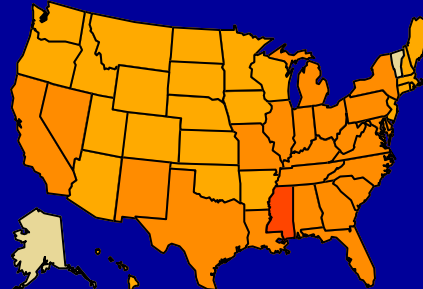


Diabetes

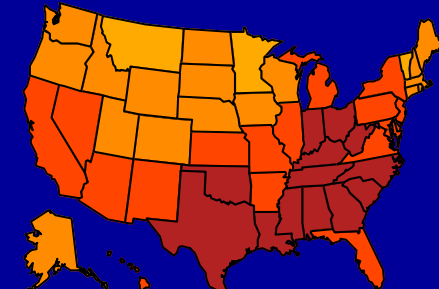
1994



2000



2008



CDC's Division of Diabetes Translation. National Diabetes Surveillance System available at <http://www.cdc.gov/diabetes/statistics>

Obesity and Overweight in Boston

■ Adults

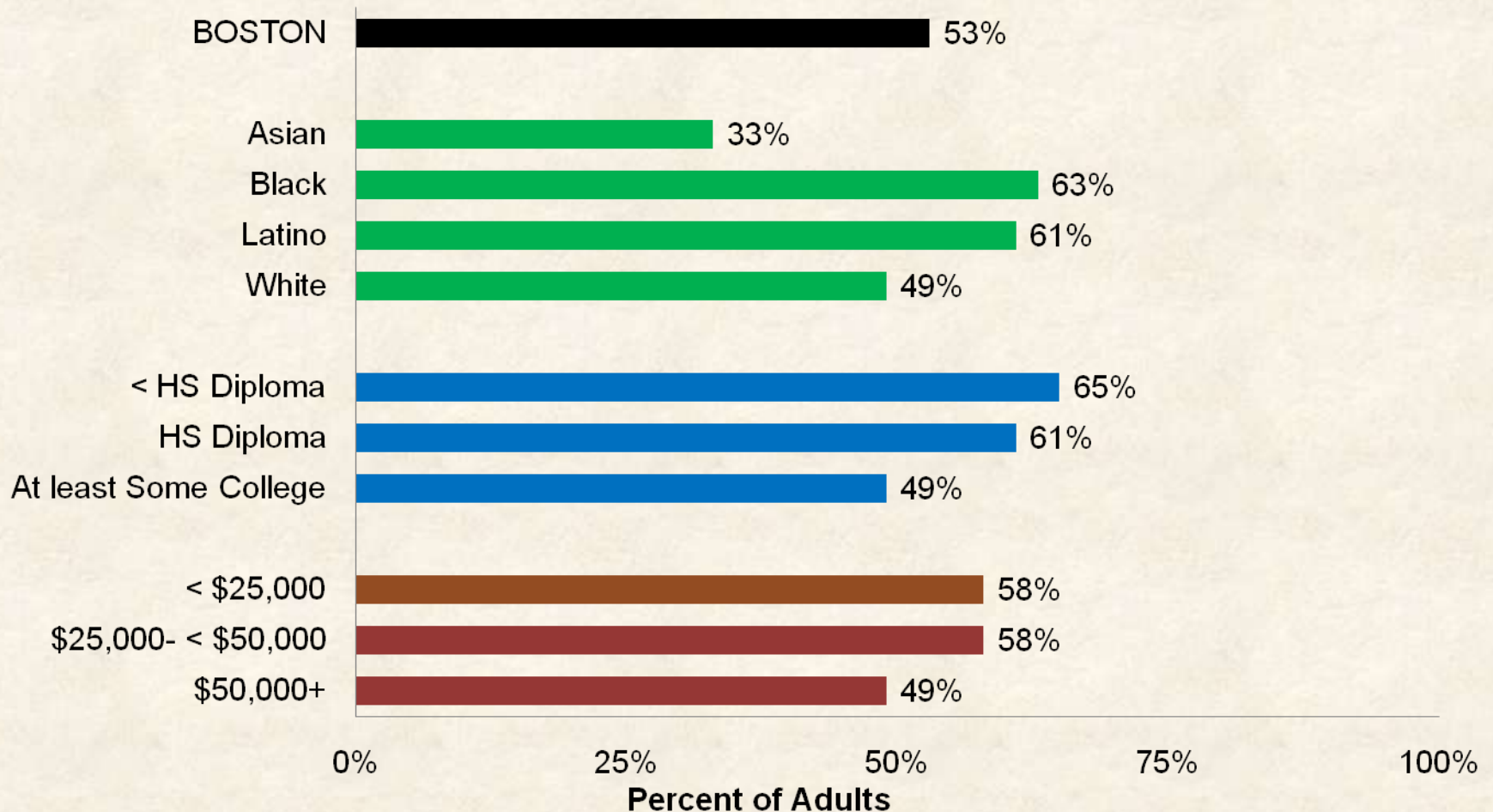
- 30% overweight
- 23% obese

■ Children and Youth

- 40% of Boston Public School students are overweight or obese

Obesity and Overweight in Boston

Overweight/Obesity in Adults by Race/Ethnicity, Education Level, Household Income



Data from 2006 and 2008 combined

Underlying Issues in Obesity Trends

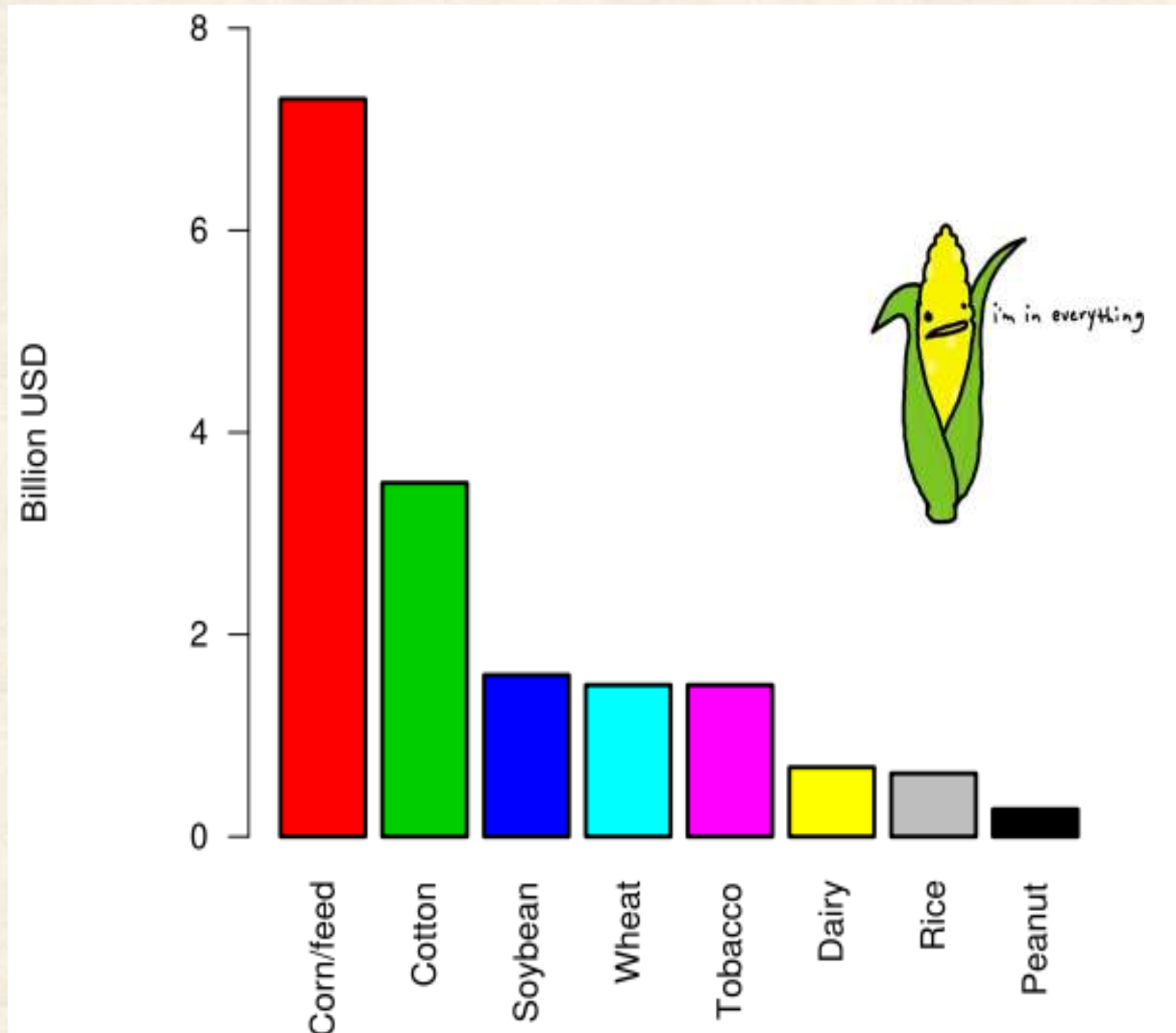


What's Happened in Past 30 Years?

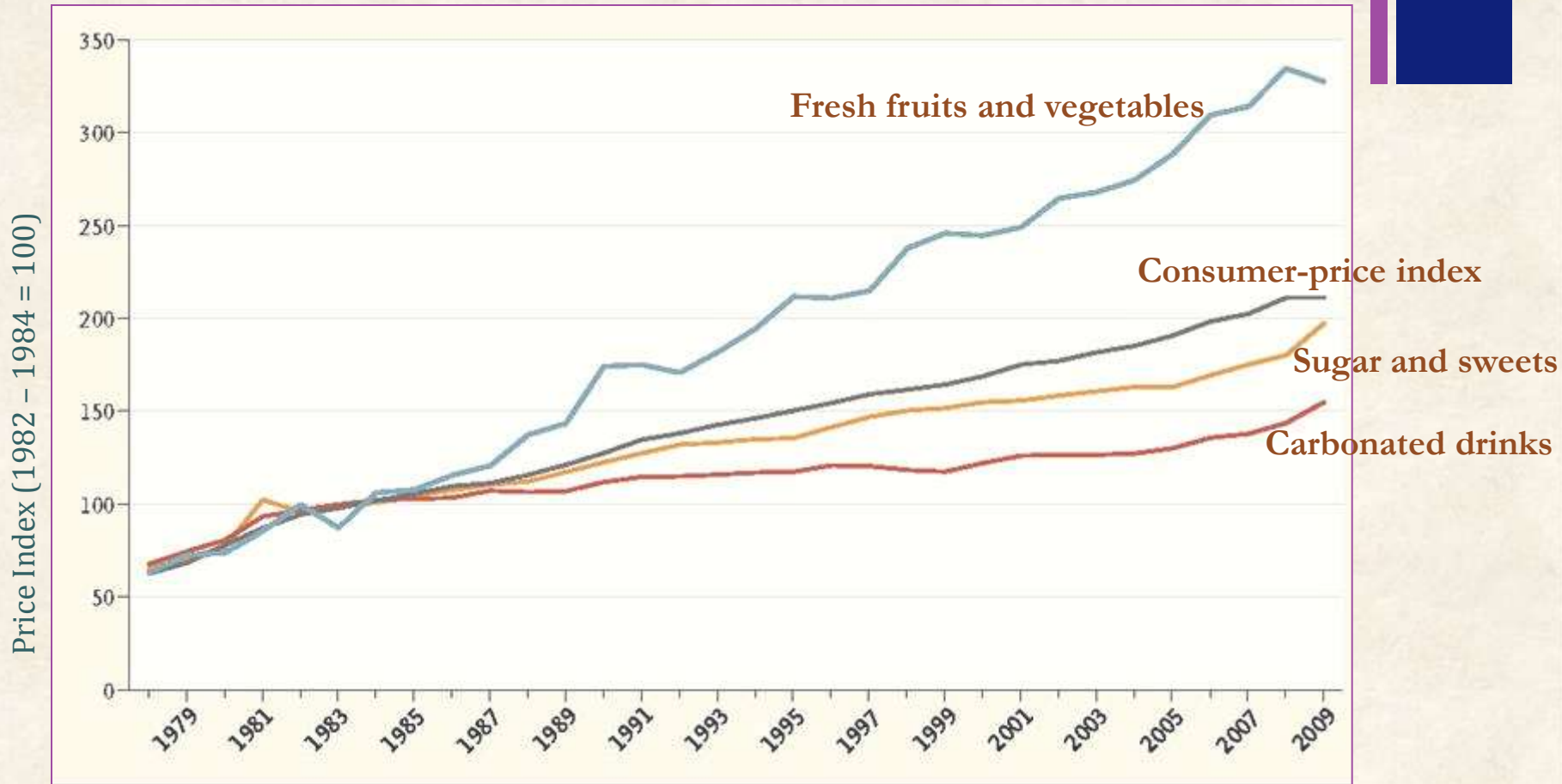
- Wide availability of cheap, fast junk food
- Farm Bill: Subsidies for certain agricultural products
- Intense corporate advertising of junk foods
- Lifestyle changes: Eating out more
- Larger portion sizes
- More reliance on cars / Less walking and biking
- More screen time
- Families have less time & money
- Financial and academic pressures on schools

Influence of US Farm Bill Policies

Crop subsidies in billions of dollars, 2005

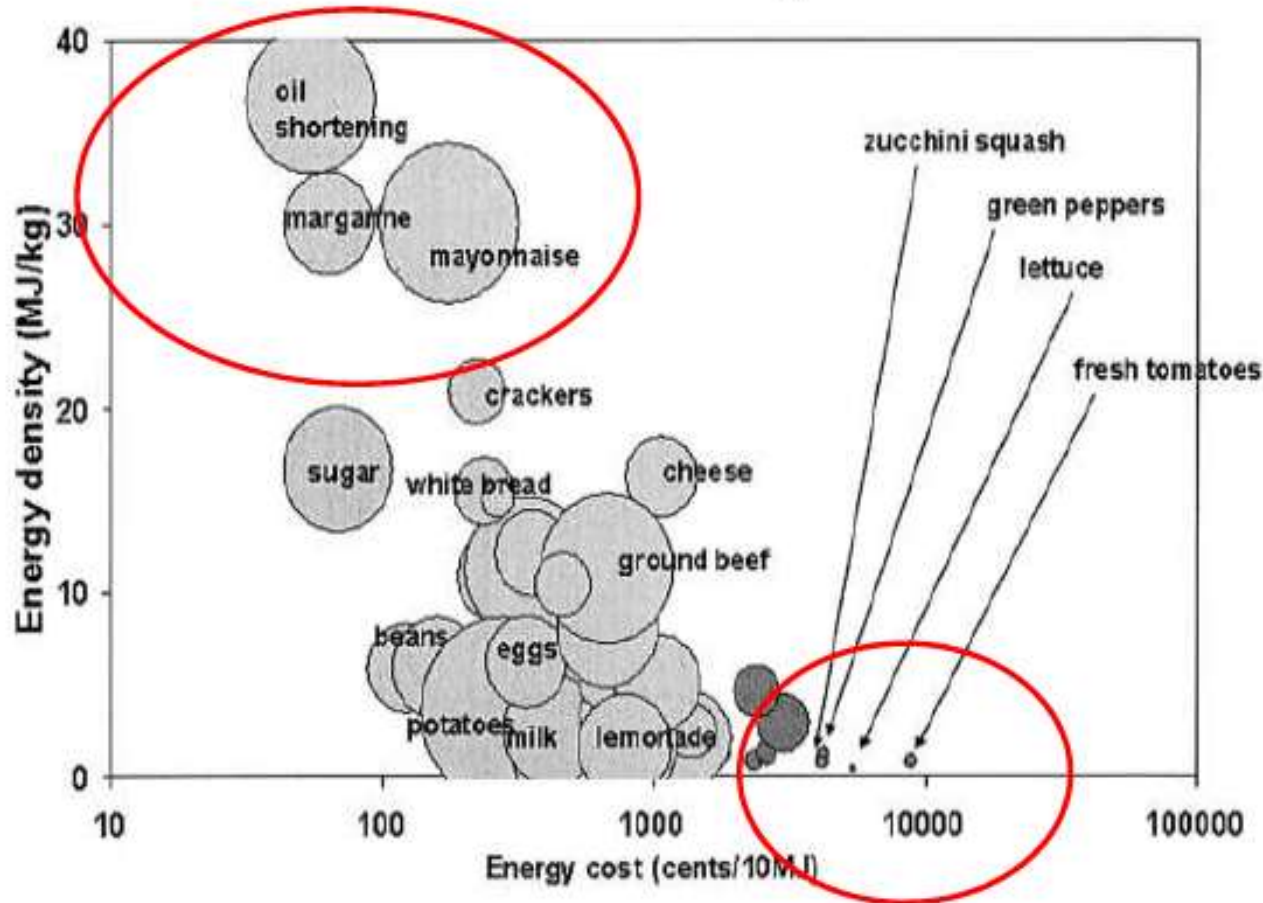


Unprocessed Food Costs More and Junk Food is Cheaper



Data are from the Bureau of Labor Statistics and represent the U.S. city averages for all urban consumers in January of each year.

Energy density and energy costs for foods in the Thrifty Food Plan weekly menus



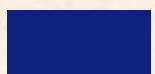
Drewnowski, A. et al. J. Nutr. 2005;135:900-904

Influence of Food Marketing

Marketing, especially to youth, is big business



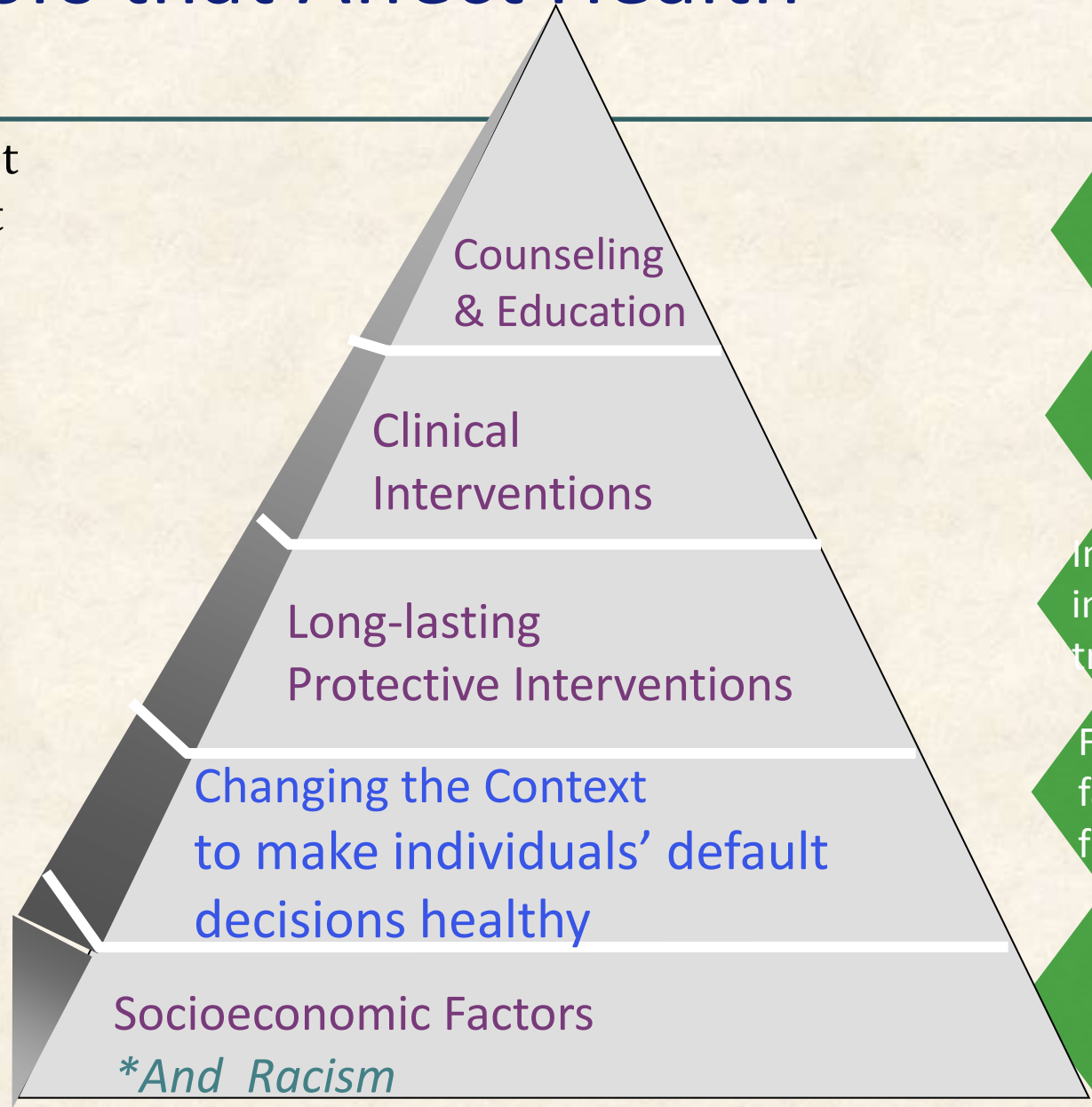
Factors that Affect Health



Smallest Impact



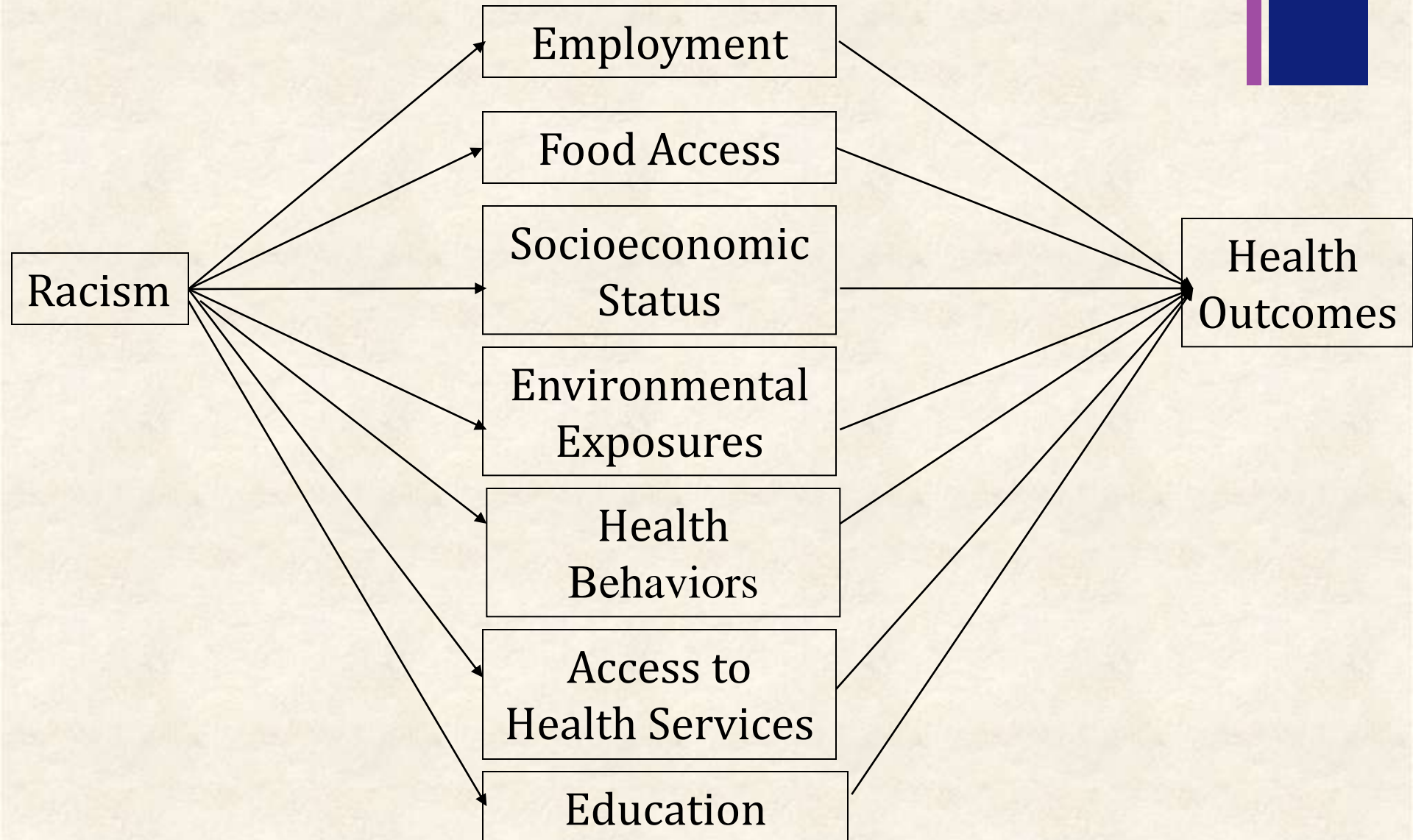
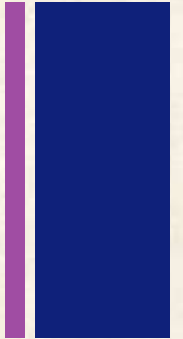
Largest Impact



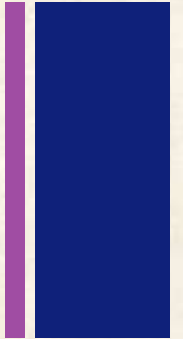
Examples

- Eat healthy, be physically active
- Rx for high blood pressure, high cholesterol, diabetes
- Immunizations, brief intervention, cessation treatment, colonoscopy
- Fluoridation, Og trans fat, iodization, smoke-free laws, tobacco tax
- Poverty, education, housing, inequality

Health Equity Framework



So what are you thinking?

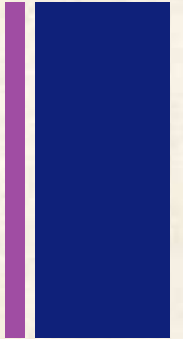


- The problem is overwhelming!
- How can I do anything about this?
- How will this help me to help my patients?

What Can We Do?

Policies and Systems for Healthy Eating and Active Living

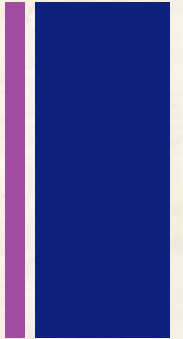
- Make healthy foods more accessible and affordable
 - US Farm Bill
 - Child Nutrition Act Reauthorization
- Limit fast food and beverage marketing
 - Especially to children
- Decrease availability of junk food and sugary drinks
- Support efforts to decrease sodium in prepared foods
 - NYC sodium reduction initiative
- Increase opportunities for physical activity and active transportation
 - Especially in low income, segregated neighborhoods
 - Federal and state transportation bills



What Can We Do?

Policies and Systems for Healthy Eating and Active Living

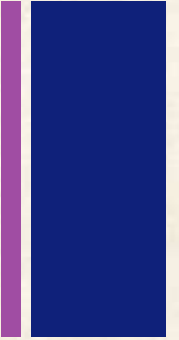
- Advocate for more physical education and activity, and healthier foods in schools
- Focus programmatic efforts on infants, children and women of color of reproductive age
- Encourage breastfeeding
- Decrease portion sizes sold in restaurants
- Workplace policies to support healthy eating/physical activity
- Promote community organizations to adopt healthy policies for employees and clients



What Can We Do?

Organizational Level

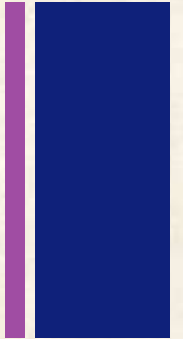
- Promote walking clubs, stair-walking
- Offer nutrition and life skill trainings
- Promote healthy messaging and ads



What Can We Do?

Big Picture

- Fight racism and socio-economic inequities
 - Jobs and Economic Development
 - Education
 - Affordable housing
- Raise awareness about health outcomes and inequities
 - In your community, with friends and family
- Share understandable and actionable data with your clients and partners
- Make time to advocate for policy changes and engage clients in advocacy efforts
- Vote!
 - November 2



+

Everyone needs to be involved!

Q & A

Discussion

Anne McHugh

617-534-2616

amchugh@bphc.org

