Supersizing Our Nation

Childhood & Adult Obesity in the U.S.:

- **Facts**
- **Consequences**
- **Contributors**
- **Future Prevention Efforts**

Partnering Organizations:

NEBRASKA DEPARTMENT OF EDUCATION

Nutrition & Activity FOR HEALTH
PREVENTION WORKS

UNIVERSITY OF Nebraska Lincoln EXTENSION

Department of Health & Human Services
DHHS
NEBRASKA

NEBRASKA TEAM NUTRITION • USDA

Objectives

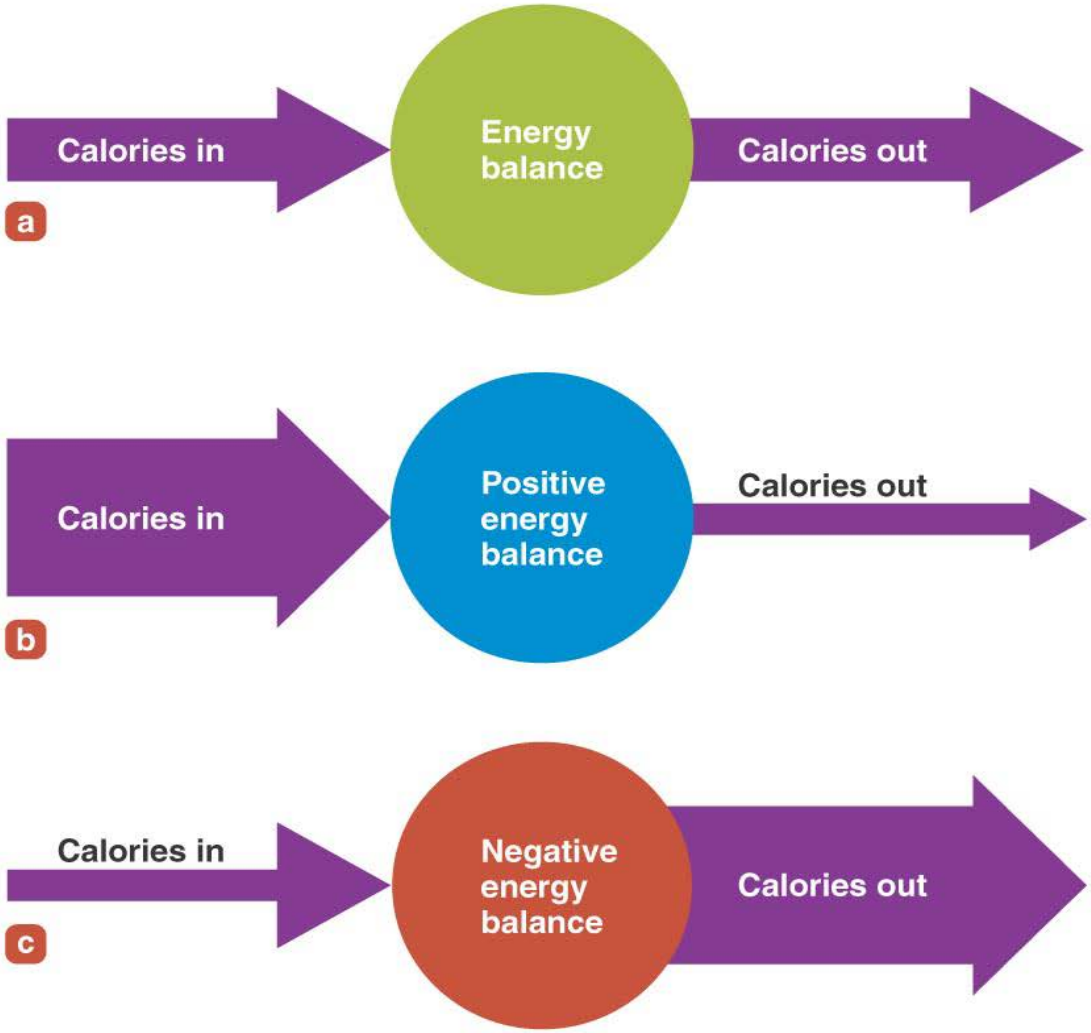
- Describe the current obesity epidemic in the U.S. for both children and adults.
- List the possible consequences of being overweight as a young child and adult.
- Discuss the factors in the environment that make it harder to eat smart and move more.
- Describe the role of the child care environment and of child care staff in helping to prevent overweight in children.

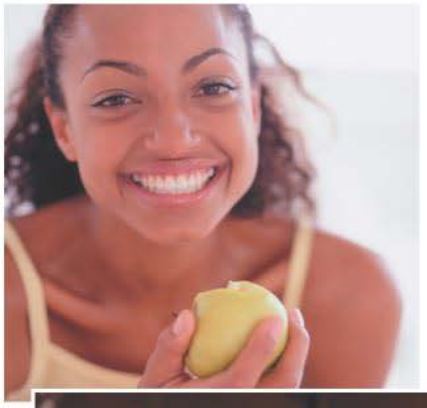
Why the Increase in Obesity?

- Rising obesity rates result from increases in caloric intake and/or decreases in caloric expenditure.
- The rise in obesity rates in the last decade could be explained by as little as an average net ↑ of 100 calories per day.

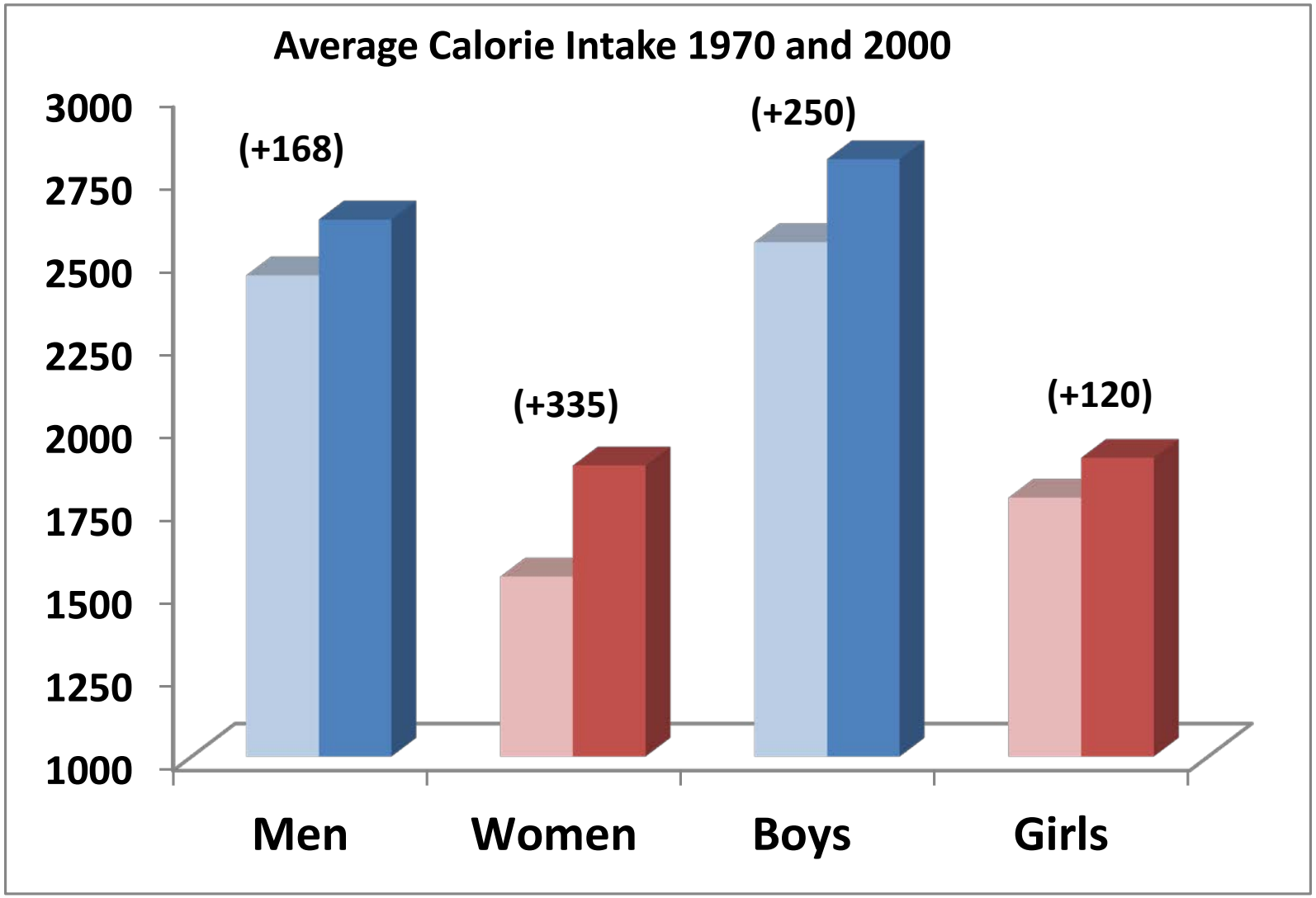
Energy In	Energy Out
12 carrots (40 calories)	9 minutes of walking
1 apple (70 calories)	15 minutes of walking
1 cookie (130 calories)	29 minutes of walking
11 chips (160 calories)	Over 35 minutes of walking
1 donut (270 calories)	60 minutes of walking

Energy Balance and Imbalances





Changes in Caloric Intake From 1970 to 2000

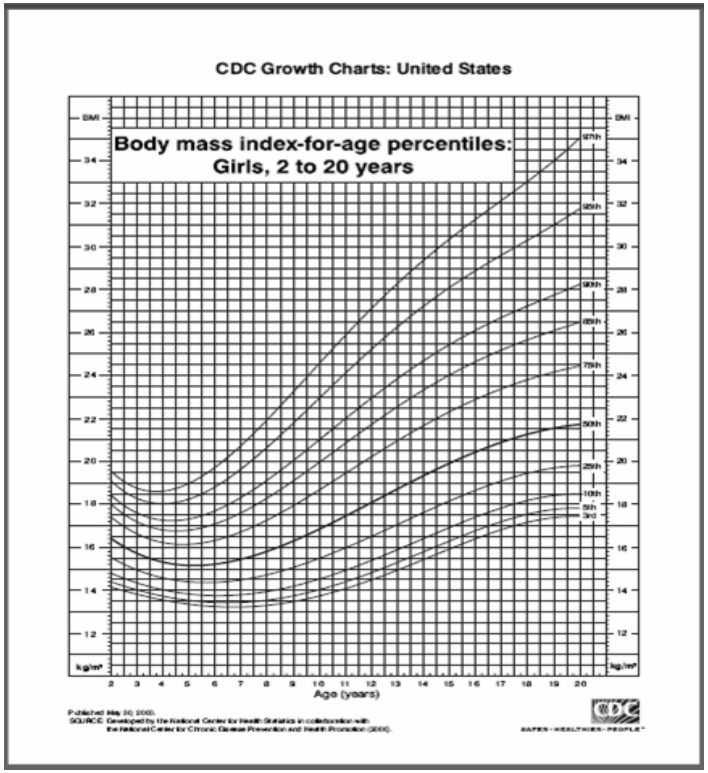


Body Mass Index (BMI) - Adults

<u>Body Mass Index (BMI)</u> - The standard measurement of overweight & obesity and is based on a weight to height ratio.

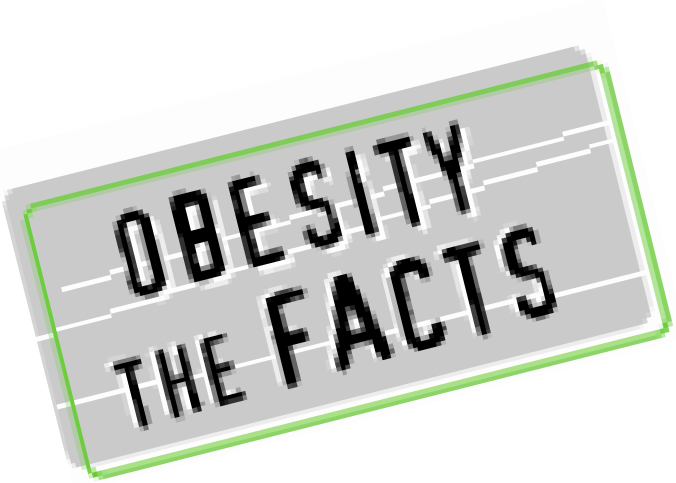
BMI classification	
Underweight	< 18.5
Normal range	18.5 - 24.9
Overweight	≥ 25.0
Preobese	25.0 - 29.9
Obese	≥ 30.0
Obese class I	30.0 - 34.9
Obese class II	35.0 - 39.9
Obese class III	≥ 40.0

Body Mass Index (BMI) - Children



- BMI is calculated from child's height & weight.
- It's plotted on a growth chart based on age & gender to find BMI percentile.
- BMI between 85th to less than 95th percentile is considered overweight.
- BMI equal to or greater than the 95 percentile is classified as obese.

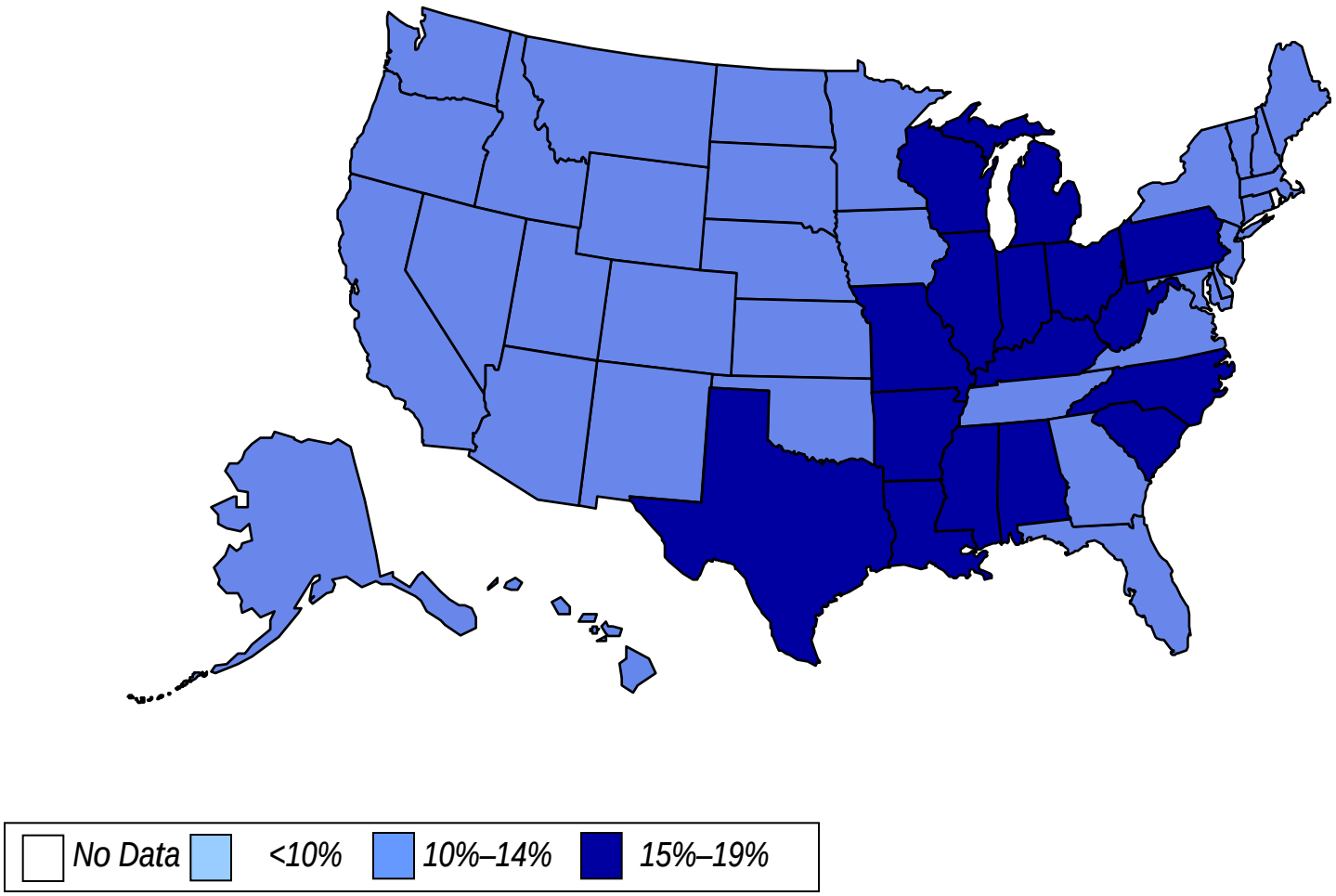
Obesity Statistics



- In the U.S., **26.7%** of **children** ages 2-5 are overweight or obese.
  - NE has the 20th highest percentage of overweight & obese children at 31.5%.
- More than one-third (**35.7%**) of U.S. **adults** are obese.

Obesity Trends* Among U.S. Adults

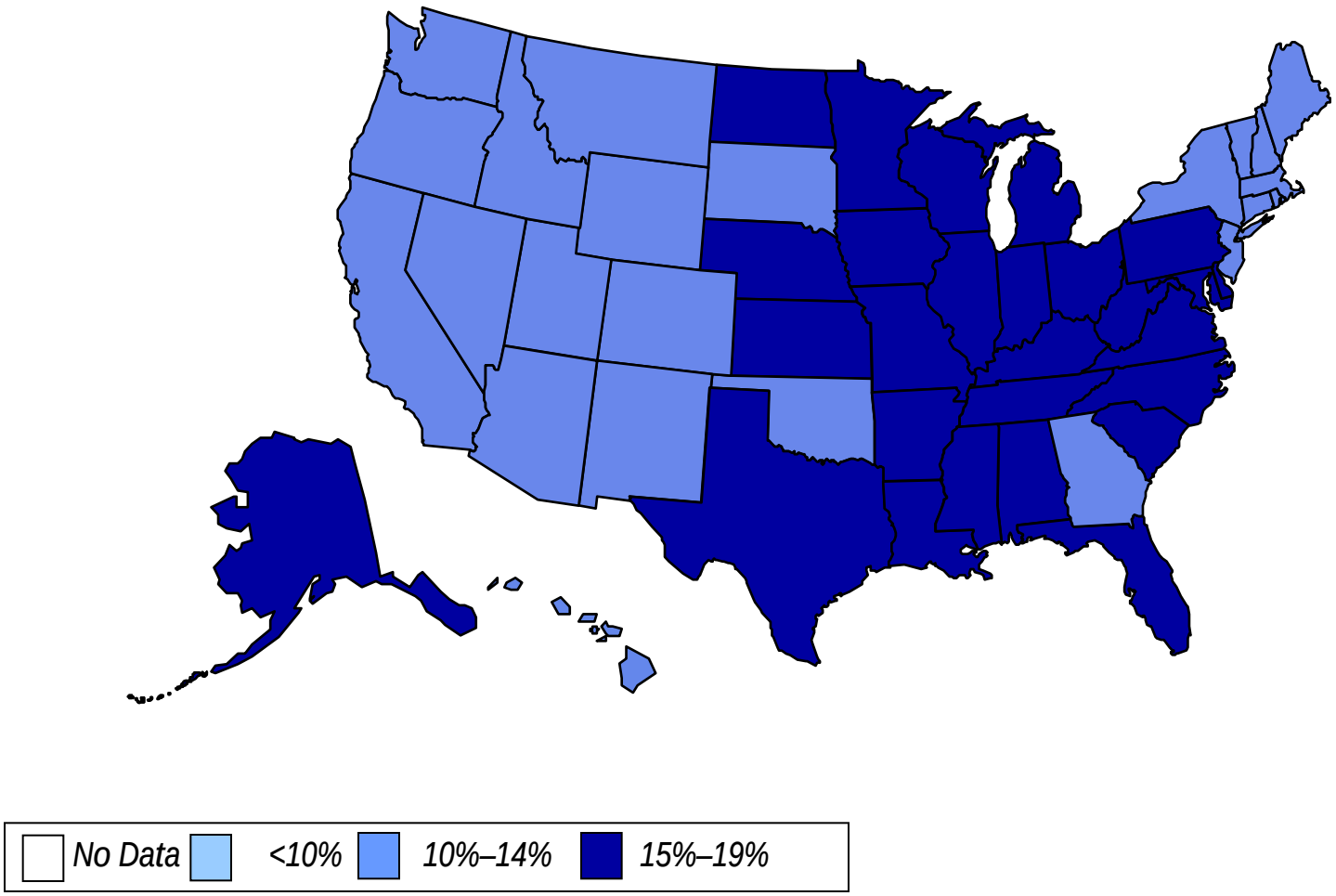
BRFSS, 1994



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

Obesity Trends* Among U.S. Adults

BRFSS, 1995



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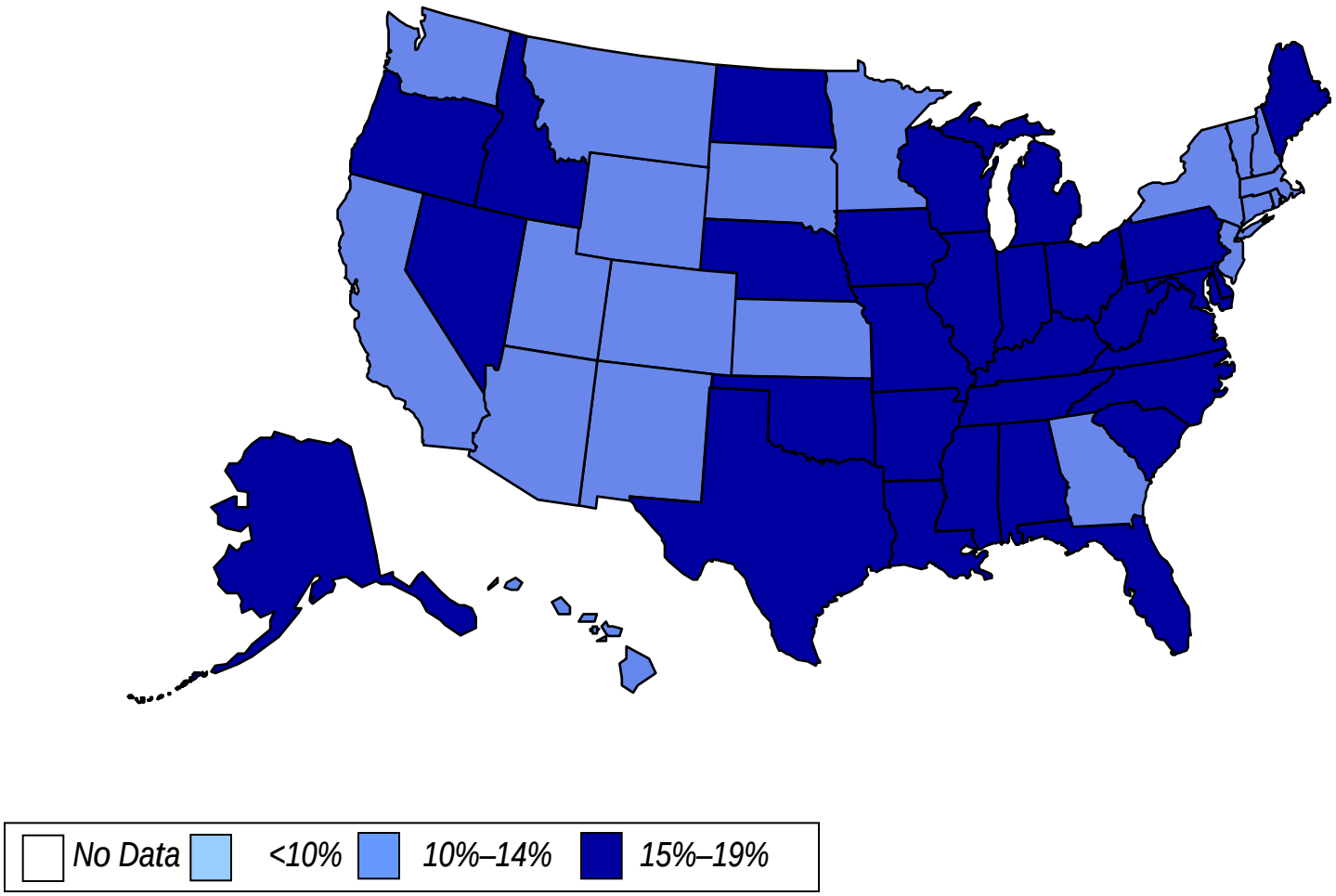
Obesity Trends* Among U.S. Adults

BRFSS, 1996



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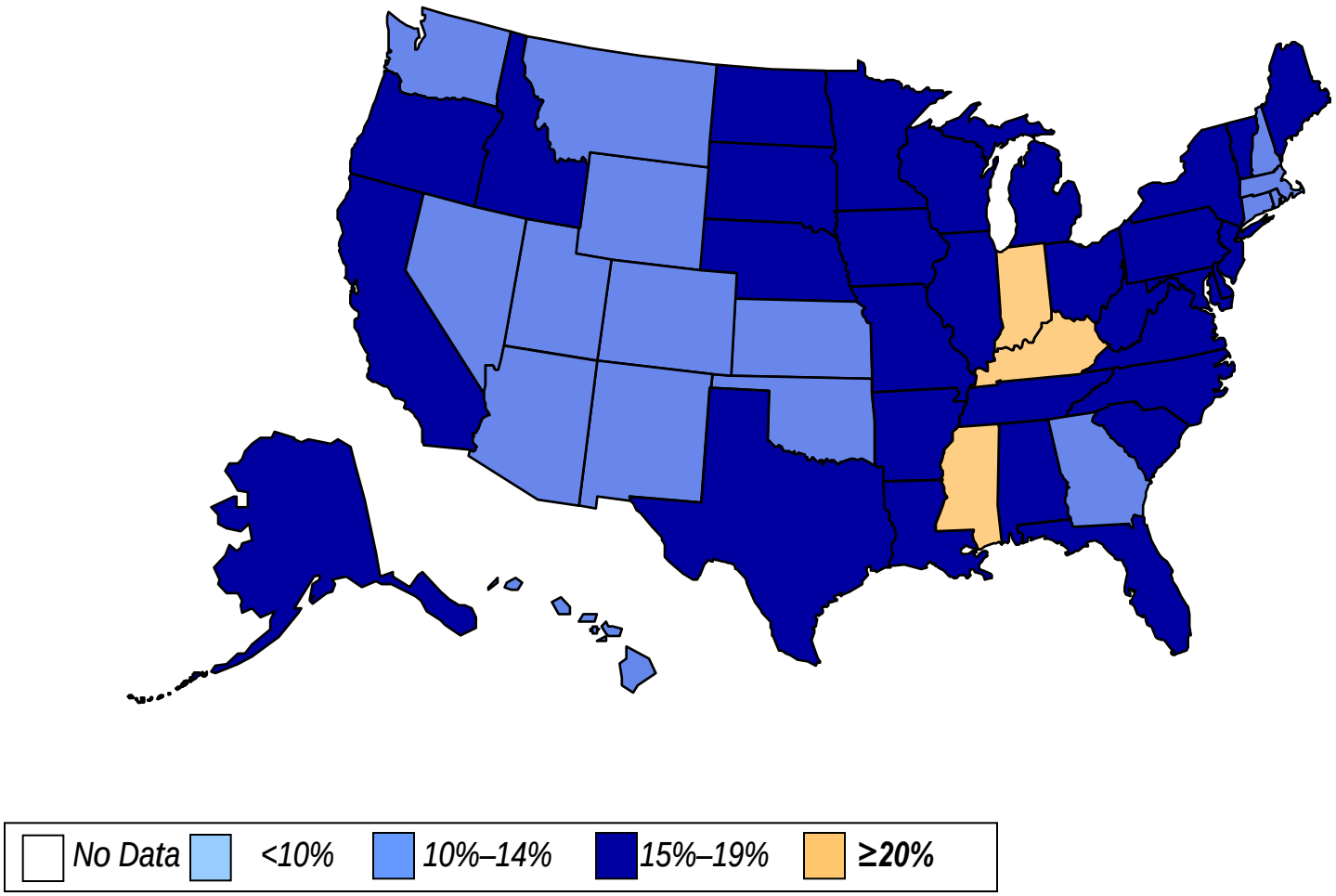
Obesity Trends* Among U.S. Adults

BRFSS, 1997



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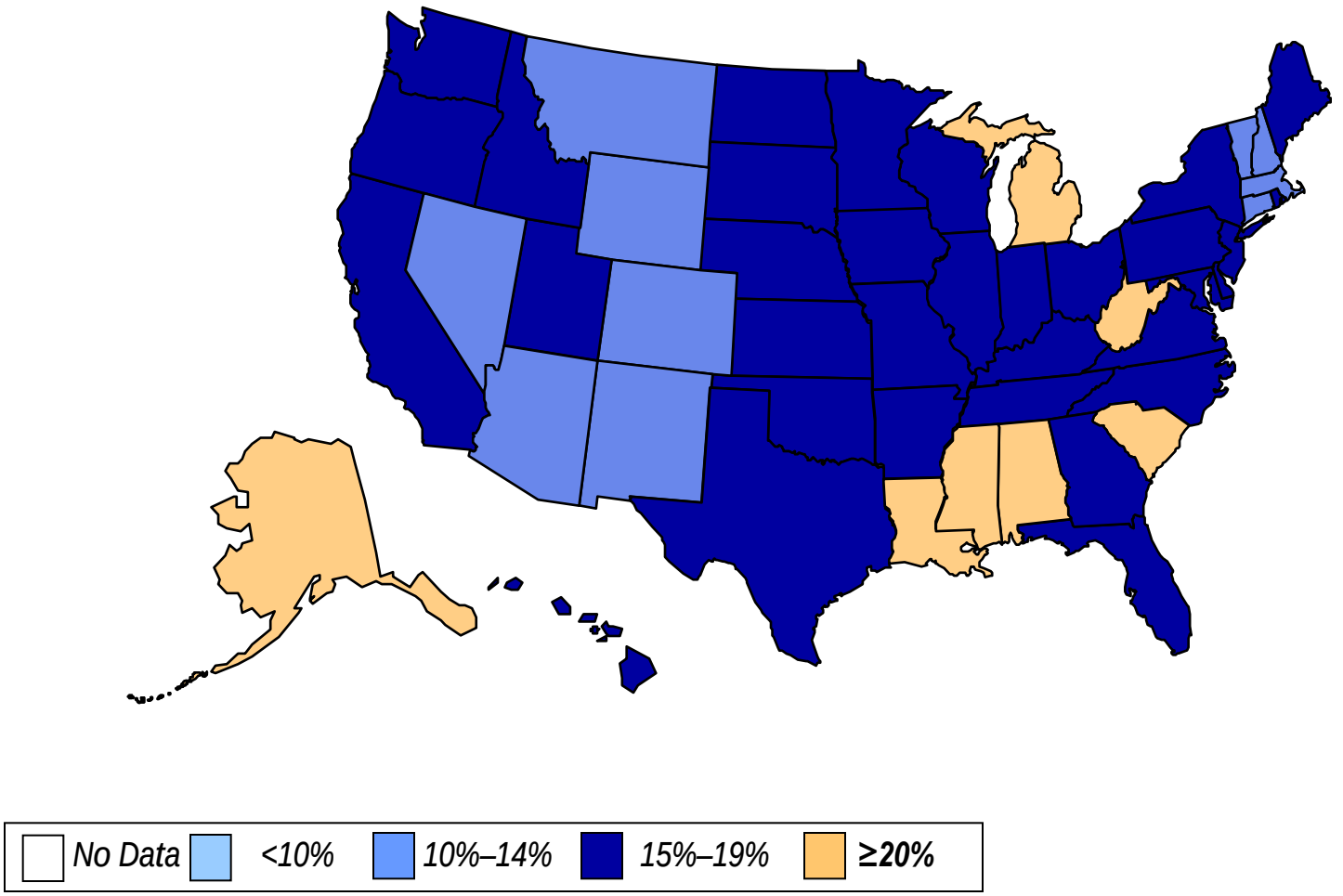
Obesity Trends* Among U.S. Adults

BRFSS, 1998



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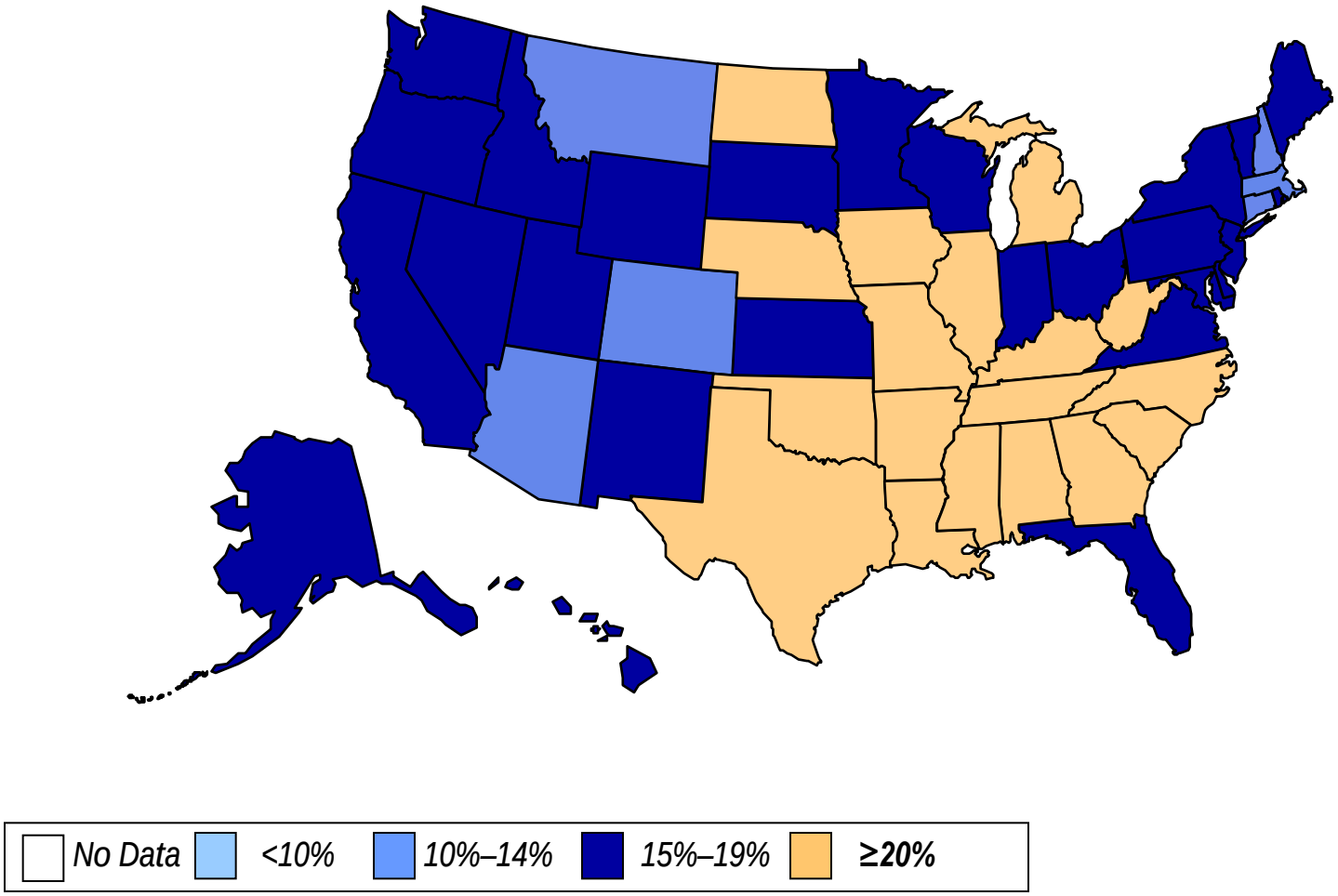
Obesity Trends* Among U.S. Adults

BRFSS, 1999



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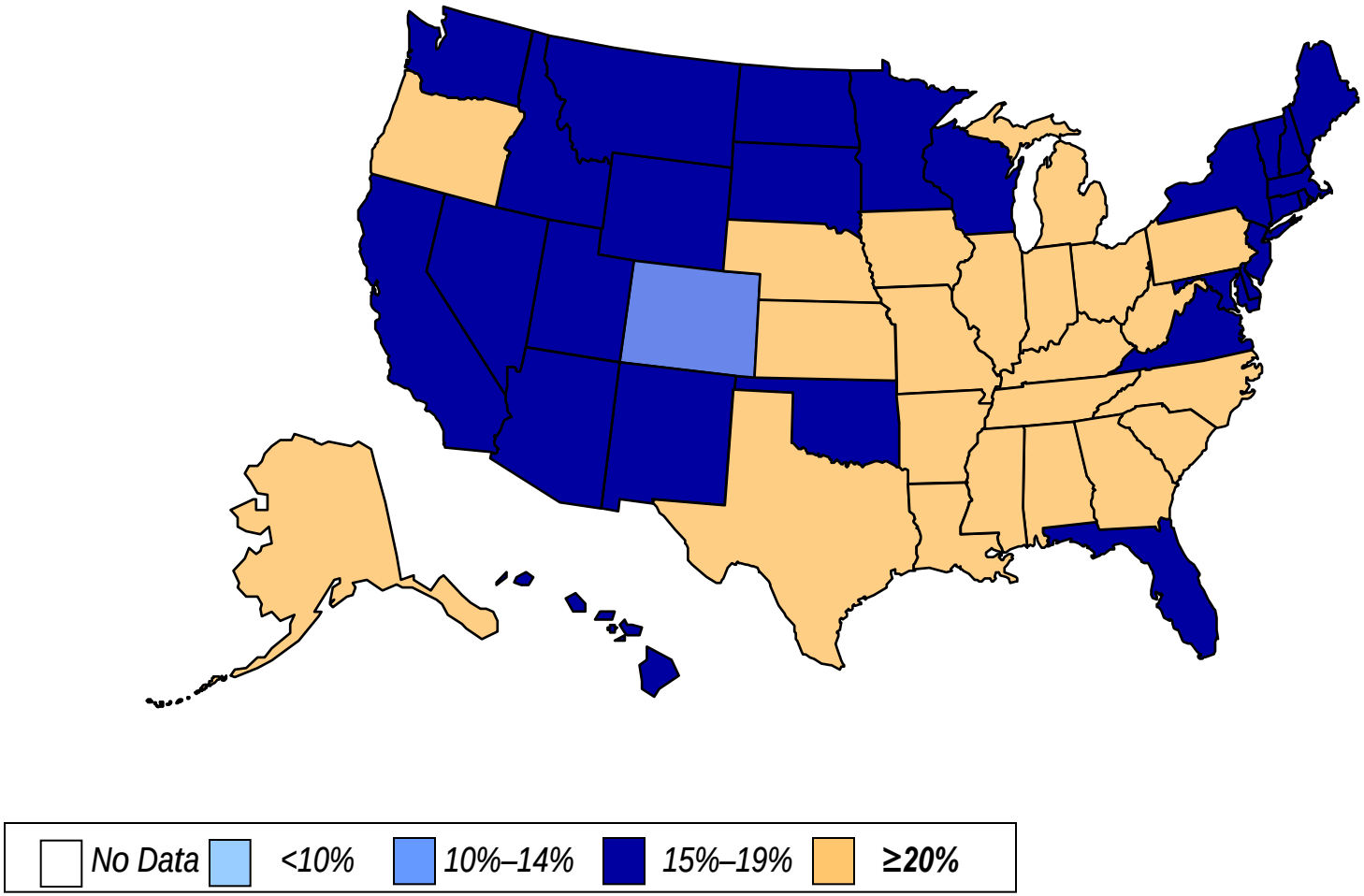
Obesity Trends* Among U.S. Adults

BRFSS, 2000



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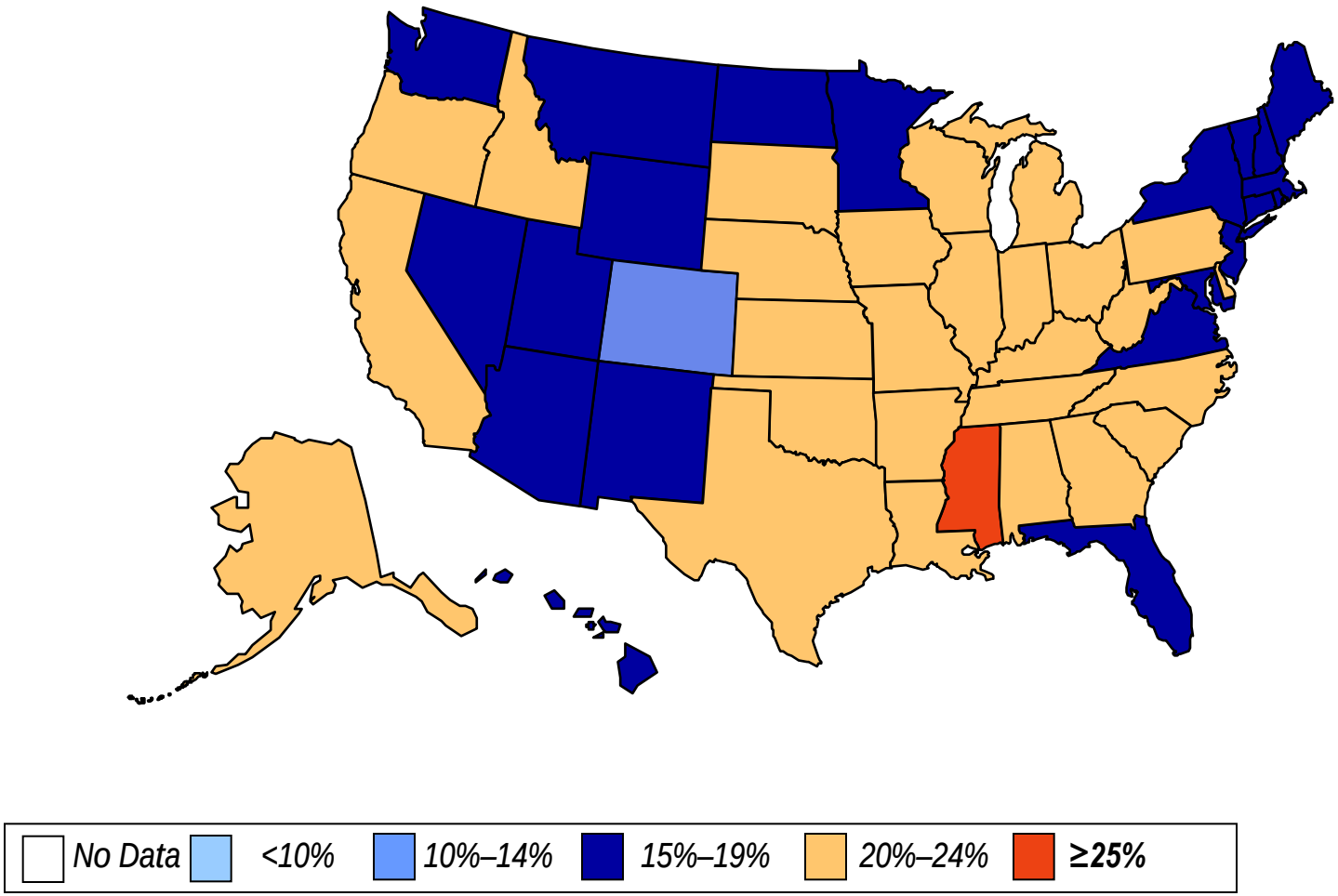
Obesity Trends* Among U.S. Adults

BRFSS, 2001



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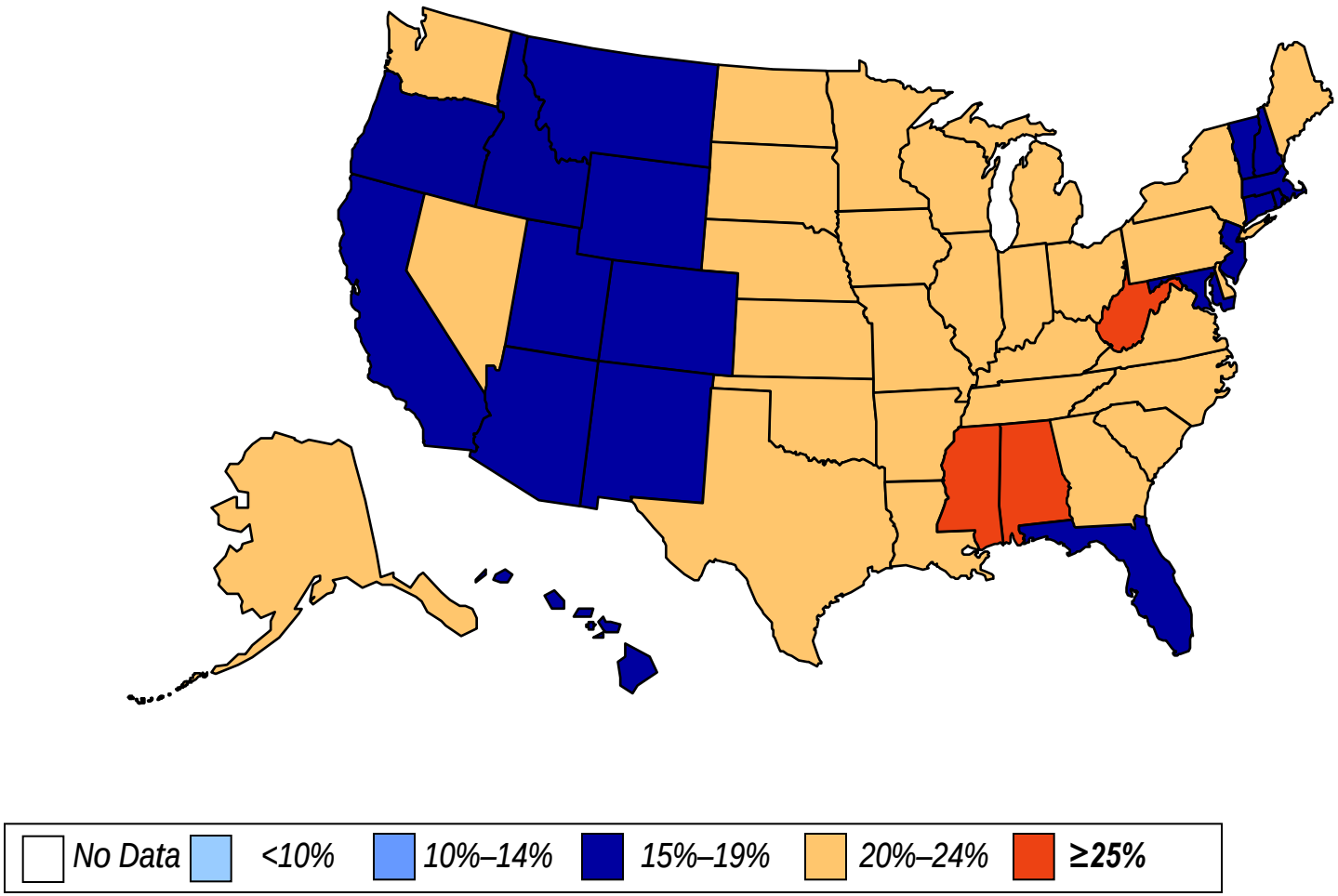
Obesity Trends* Among U.S. Adults

BRFSS, 2002



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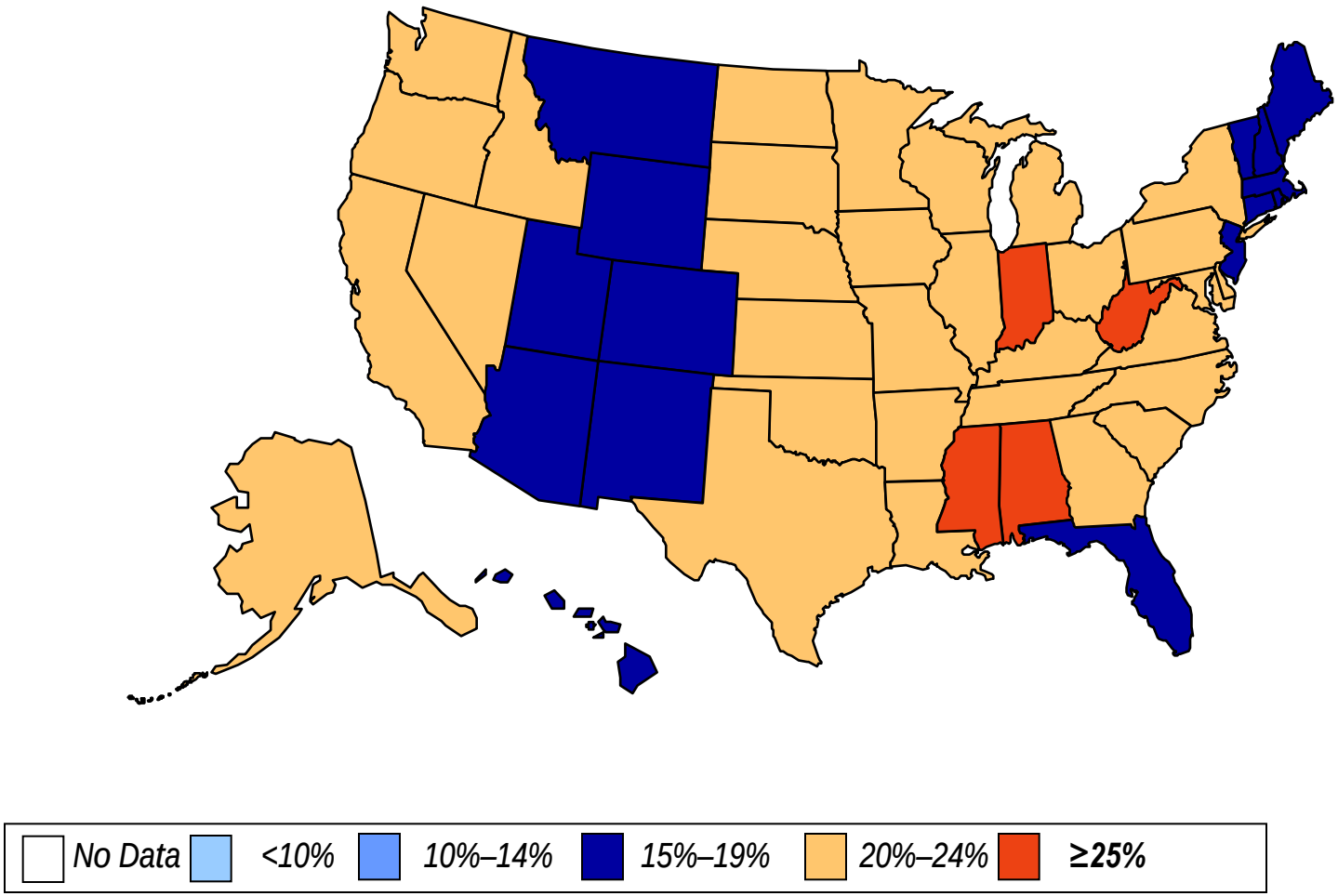
Obesity Trends* Among U.S. Adults

BRFSS, 2003



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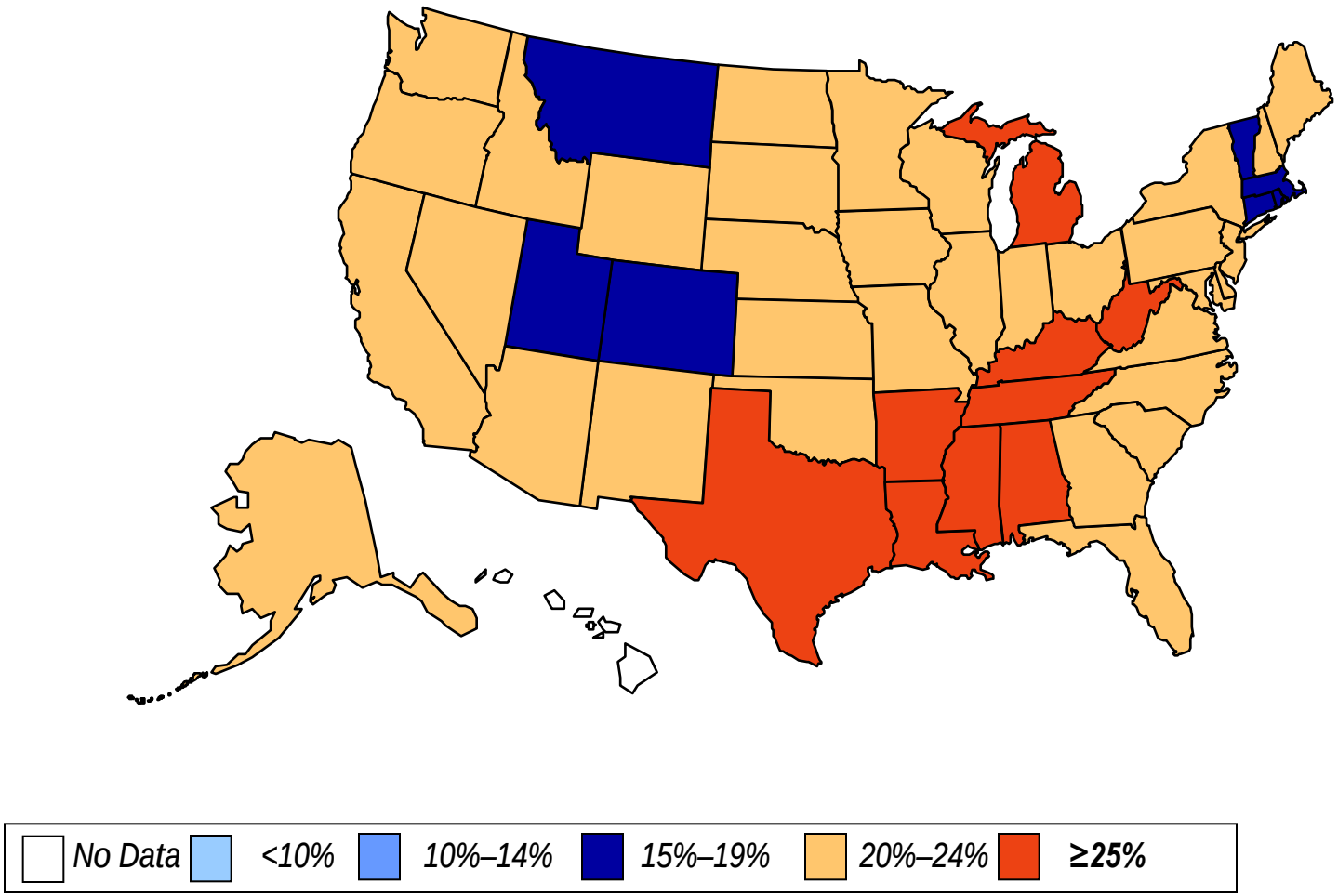
Obesity Trends* Among U.S. Adults

BRFSS, 2004



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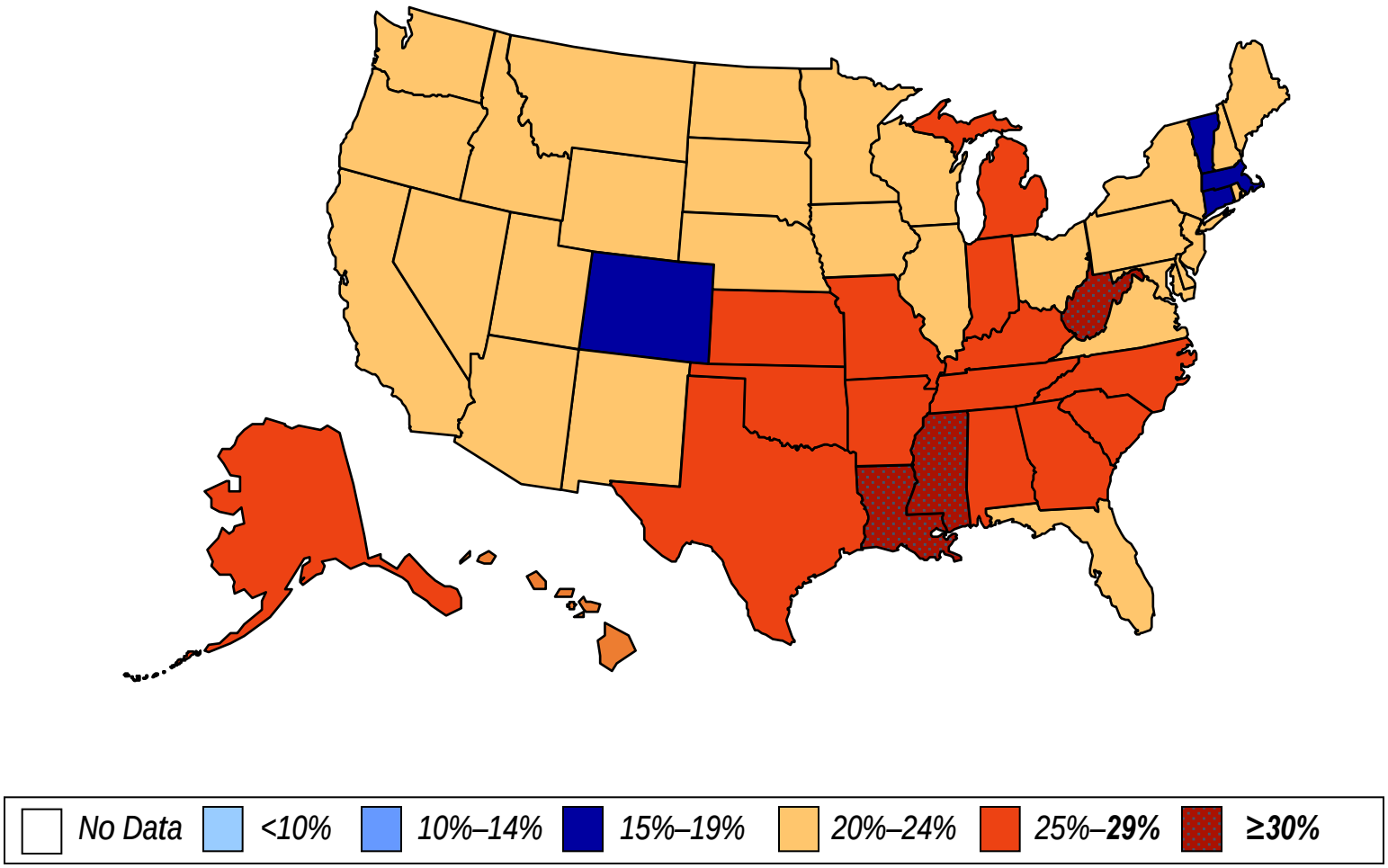
Obesity Trends* Among U.S. Adults

BRFSS, 2005



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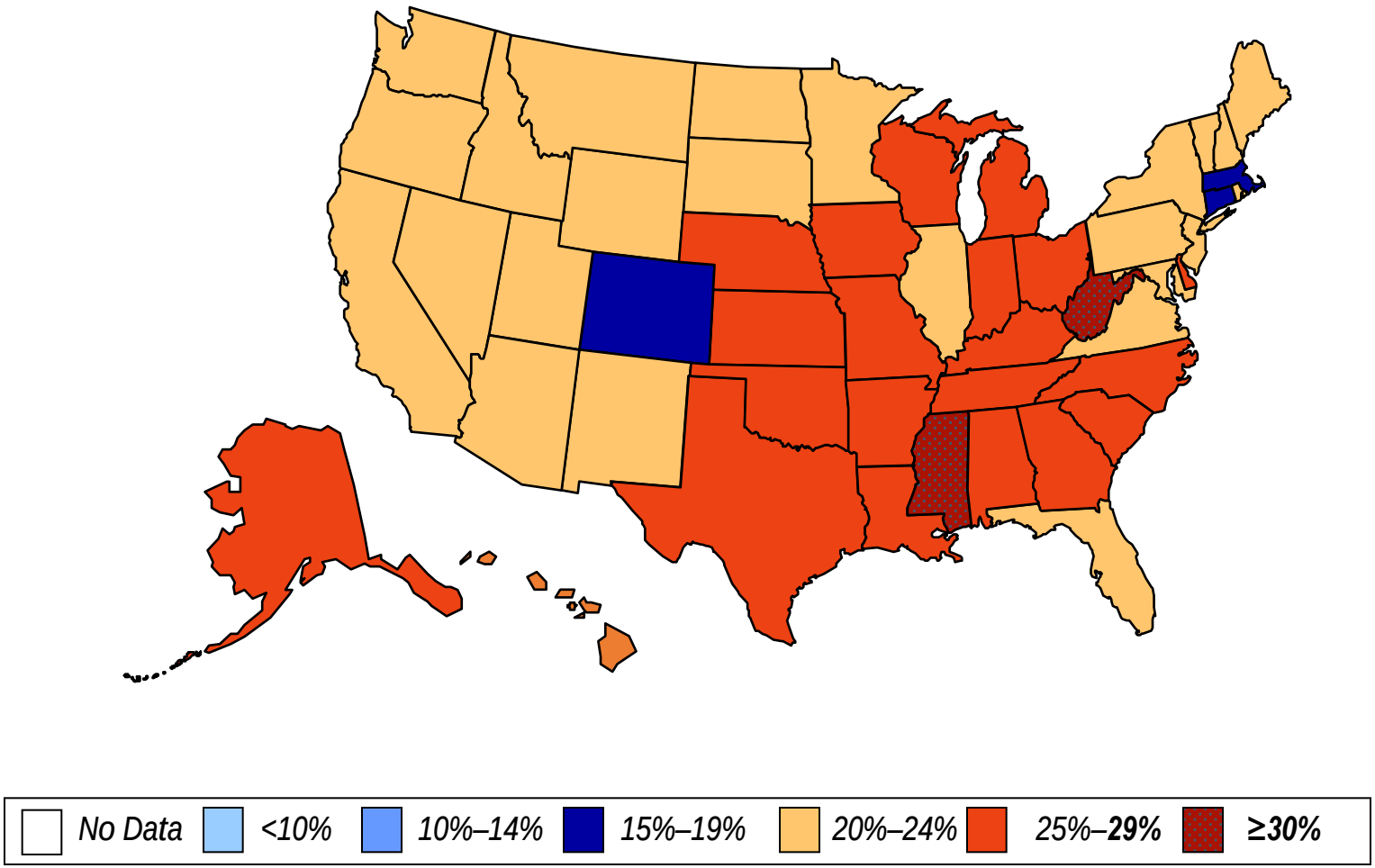
Obesity Trends* Among U.S. Adults

BRFSS, 2006



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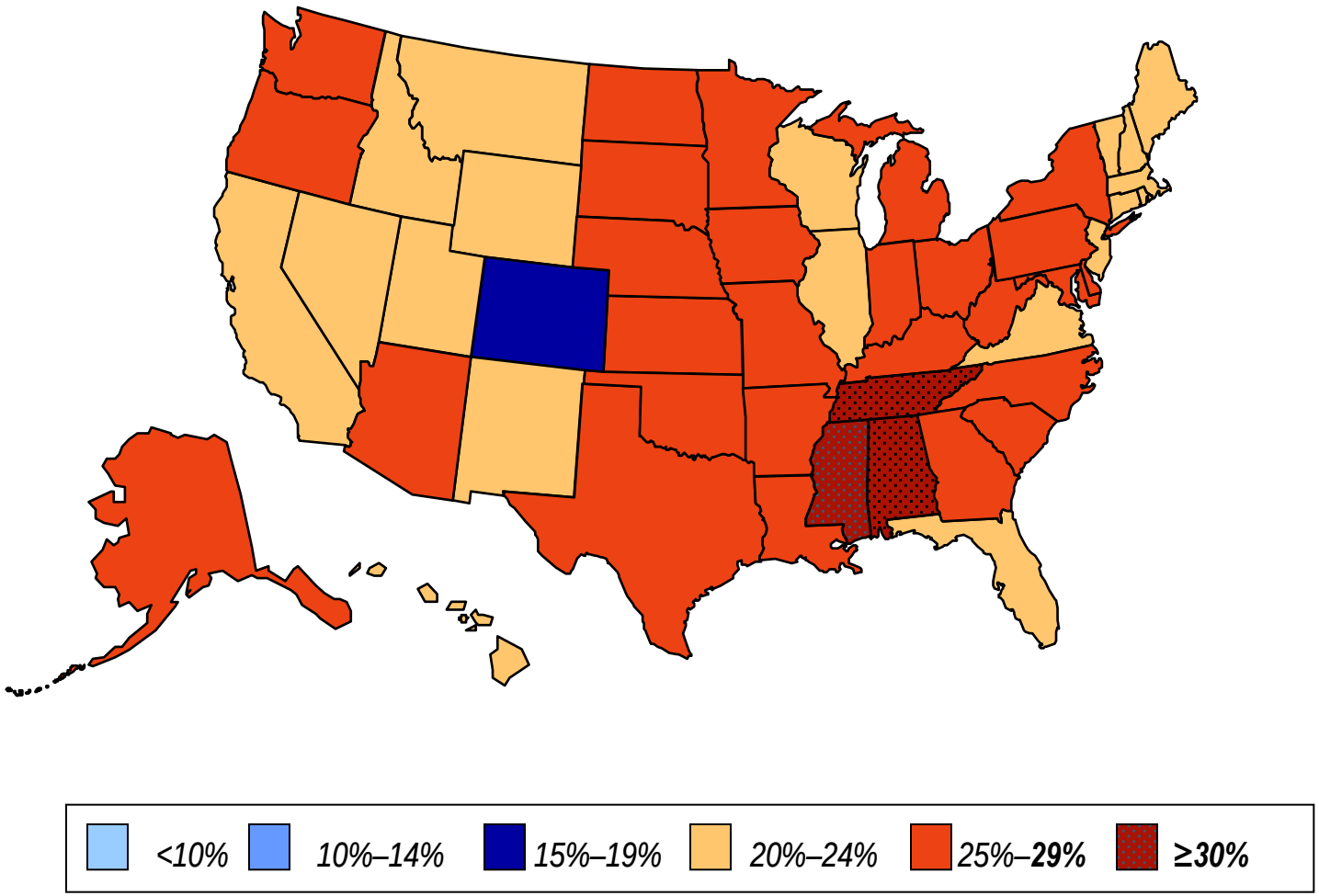
Obesity Trends* Among U.S. Adults

BRFSS, 2007



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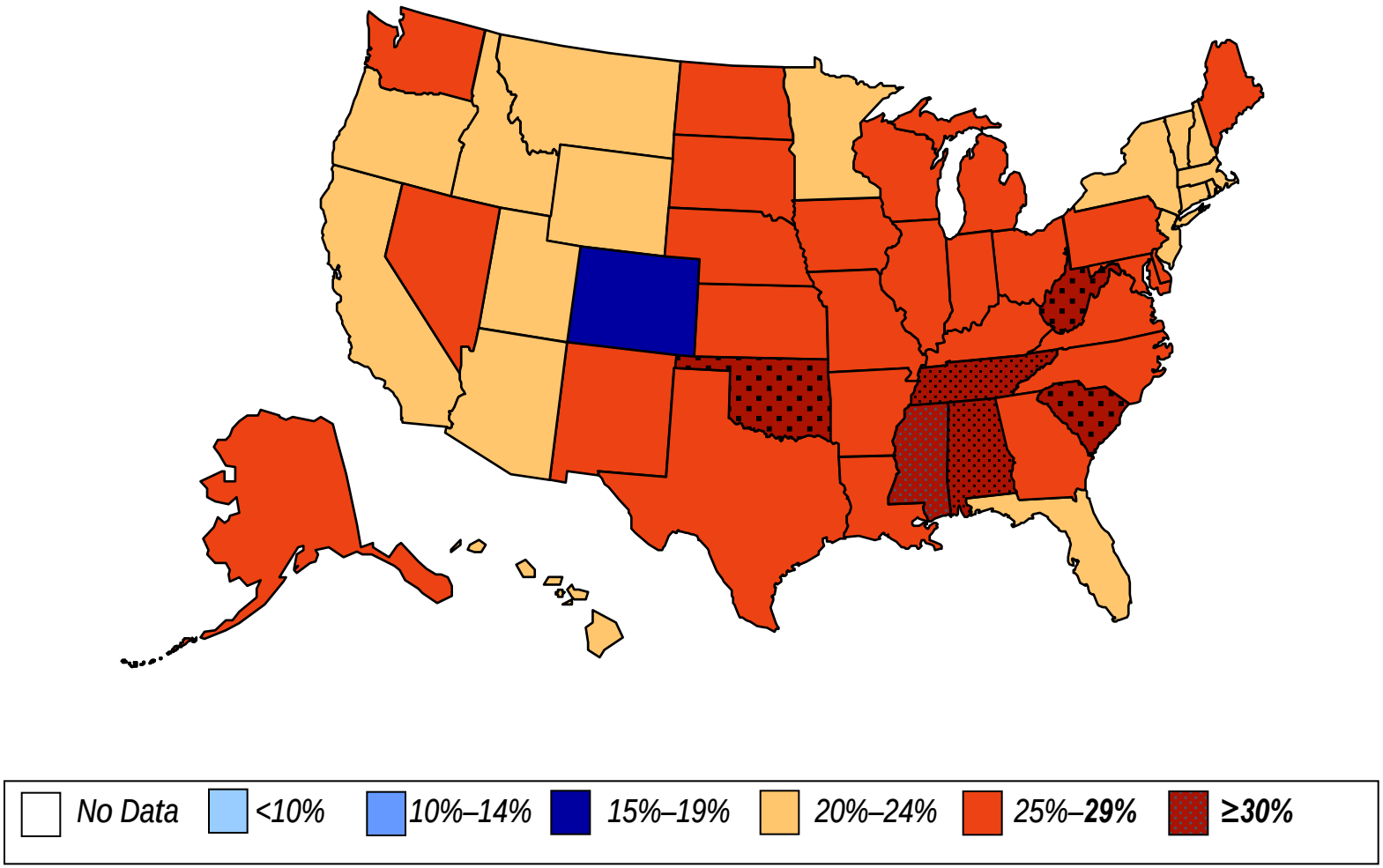
Obesity Trends* Among U.S. Adults

BRFSS, 2008



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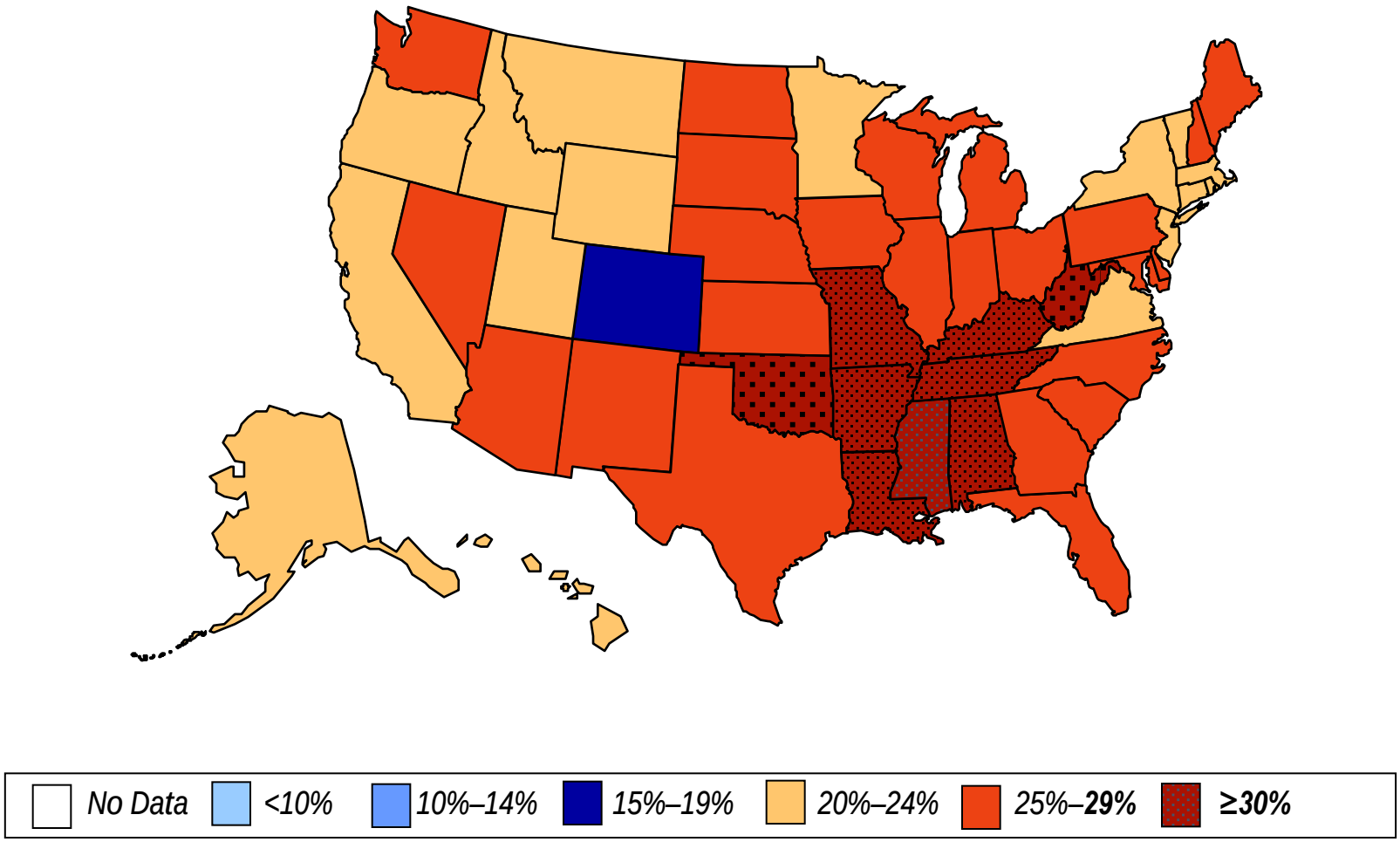
Obesity Trends* Among U.S. Adults

BRFSS, 2009



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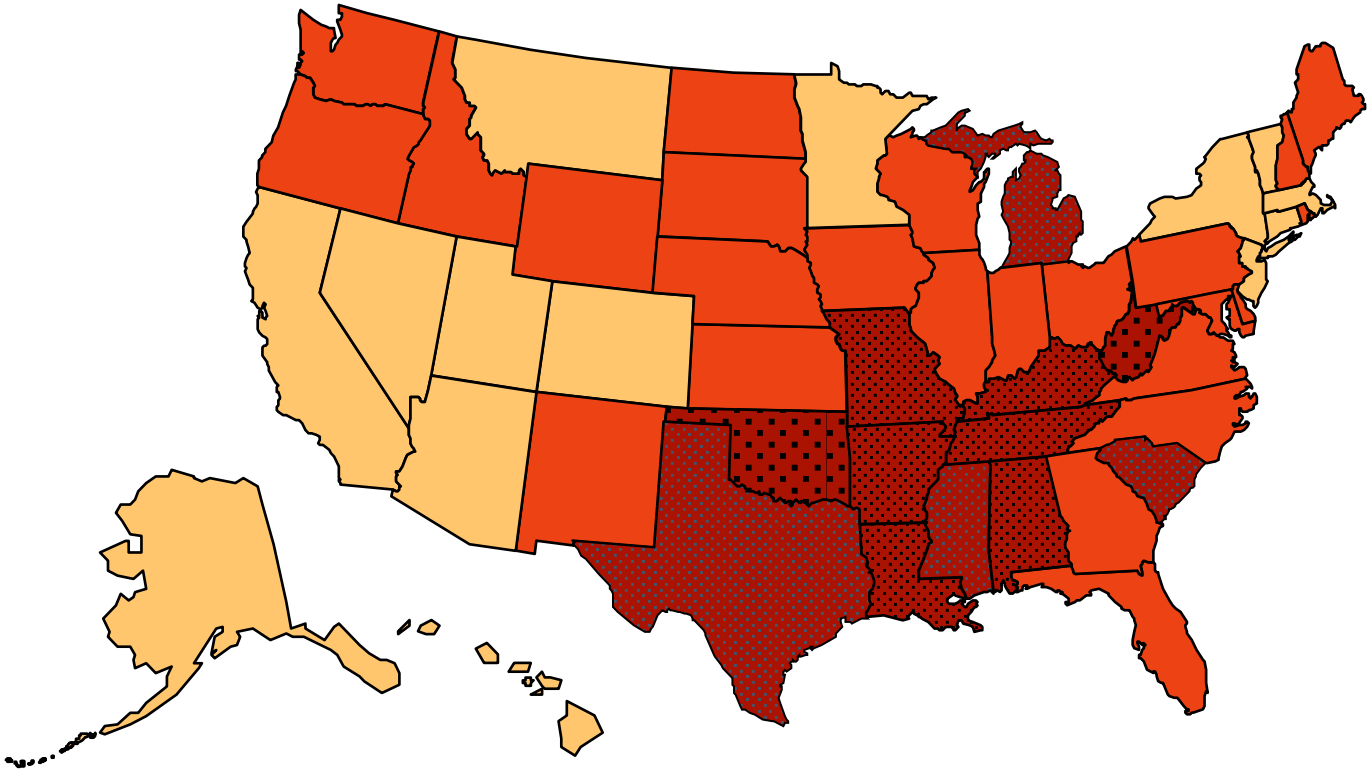
Obesity Trends* Among U.S. Adults

BRFSS, 2010

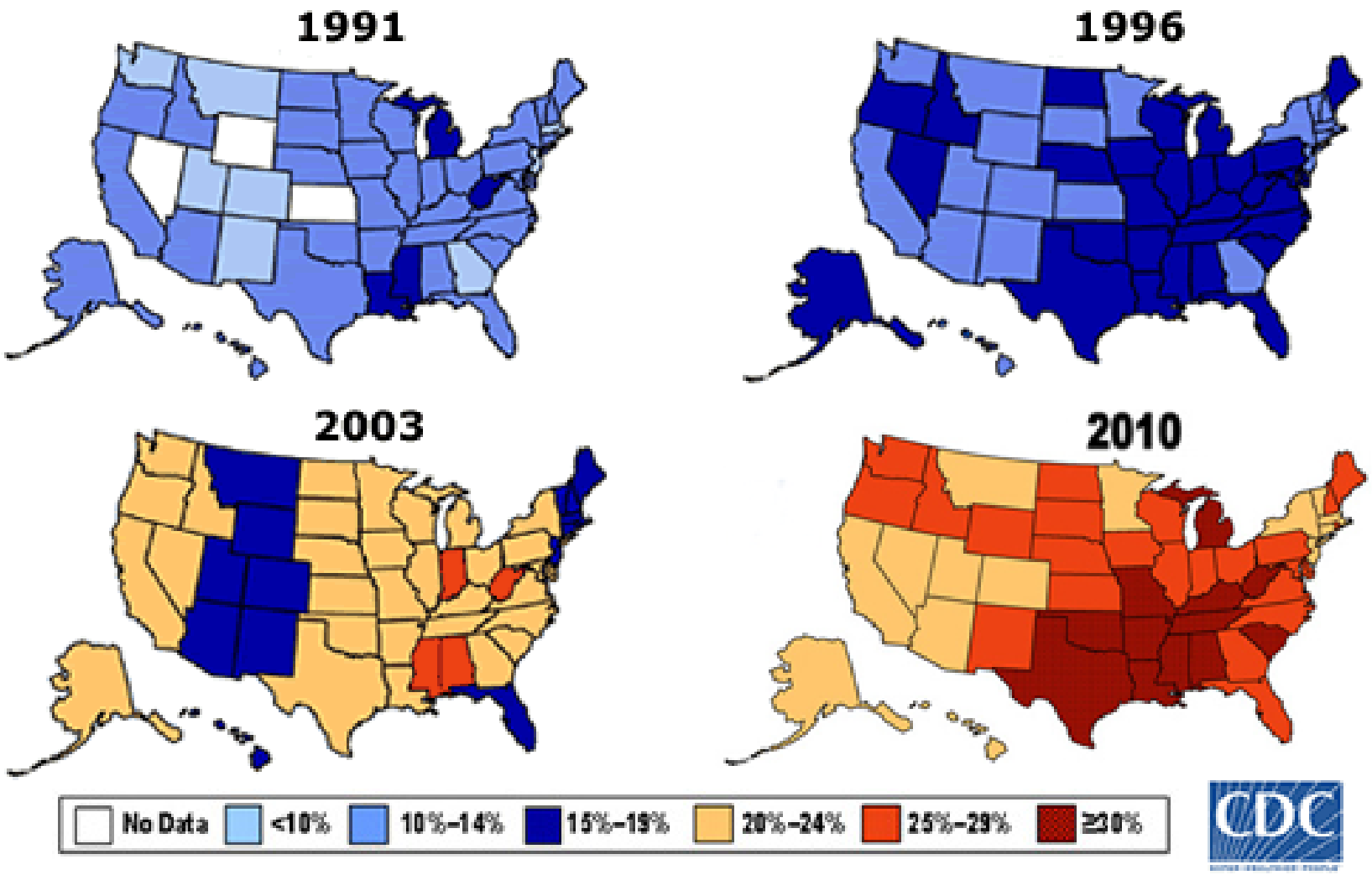


No Data | <10% | 10%–14% | 15%–19% | 20%–24% | 25%–29% | ≥30%

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

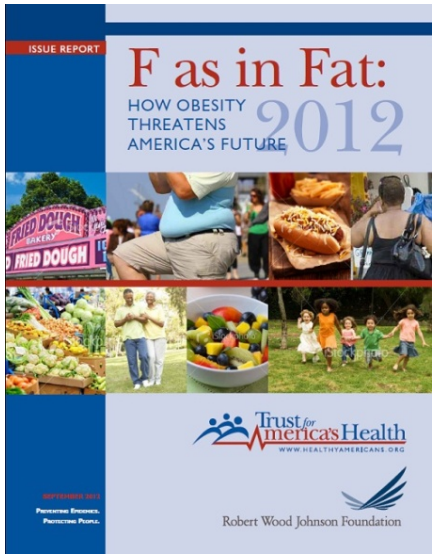
Adult Obesity* Trends in the U.S.

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



Source: Behavioral Risk Factor Surveillance System, CDC.

2030 Forecast for Nebraska From the "F as in Fat Report"



Projected Increases in Obesity Rates for Nebraska

2011 – **28.4%** NE adults obese

2030 – Projected up to **56.9%** NE adults obese

2030 Forecast for Nebraska

Projected Increases in Disease Rates for NE

Over the next 20 years, obesity could contribute to the following:

- **225,263** new cases of **type 2 diabetes,**
- **491,469** new cases of **coronary heart disease & stroke,**
- **446,122** new cases of **hypertension,**
- **290,050** new cases of **arthritis,** and
- **68,288** new cases of **obesity-related cancer** in **NE.**

2030 Forecast for Nebraska

How Reducing Obesity Could Lower Health Care Costs

If BMIs were lowered by just 5%,
Nebraska could save 7.5% in health care costs,
which would equate to
savings of approximately $3 billion by 2030.

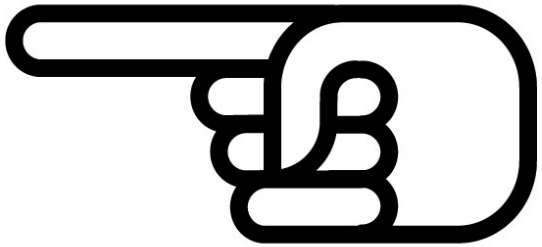
2030 Forecast for Nebraska

How Reducing Obesity Could Lower Disease Rates

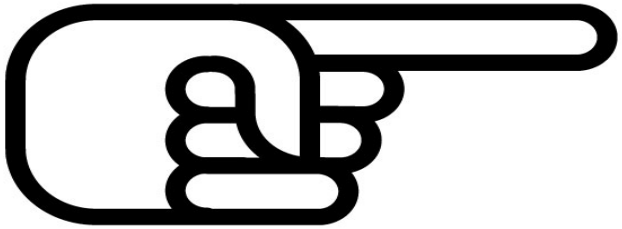
The number of NE residents who could be spared from developing new cases of major obesity-related diseases includes:

- **47,577** people could be spared from **type 2 diabetes**,
- **40,796** from **coronary heart disease** and **stroke**,
- **36,005** from **hypertension**,
- **20,601** from **arthritis**, and
- **3,243** from **obesity-related cancer**.

ACTIVITY



Life with the Wright Family



Should we be concerned for kids?

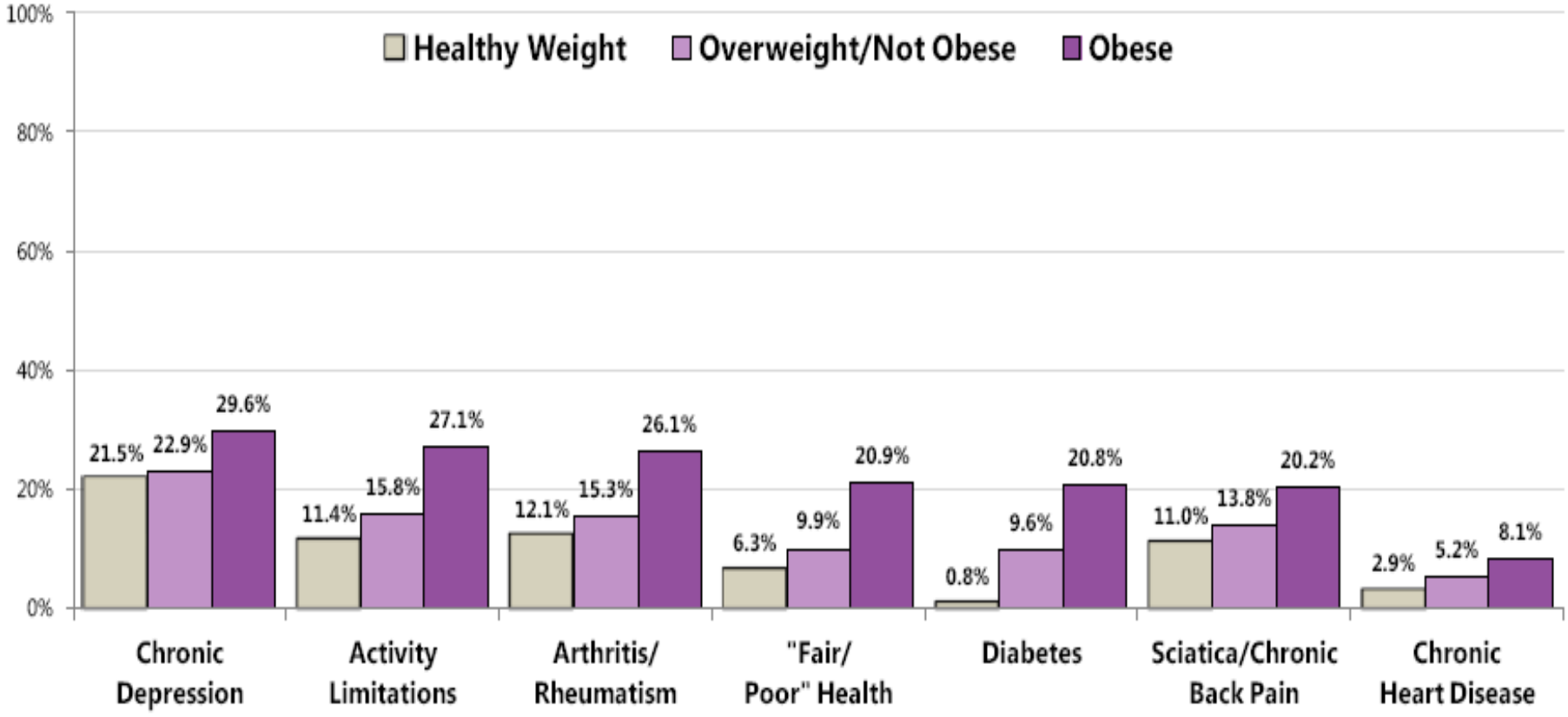
- Childhood obesity has more than tripled in 30 years.
- Overweight is now the most common nutritional disease of children.
- 1 in 3 children born in the year 2000 will develop diabetes.
- Preschool children who are overweight are almost 5x more likely to be overweight as young adults.
- Children who are obese by age 10 are 80% more likely to be obese by middle age.

Brainstorm

What are the health risks to overweight or obese children and adults?

Not just an issue of weight!

Health & Weight Relationship in Omaha



Sources: • 2011 PRC Community Health Survey, Professional Research Consultants, Inc. [Items 7, 33, 34, 38, 42, 112, 115]
Notes: • Based on reported heights and weights, asked of all respondents.

Brainstorm

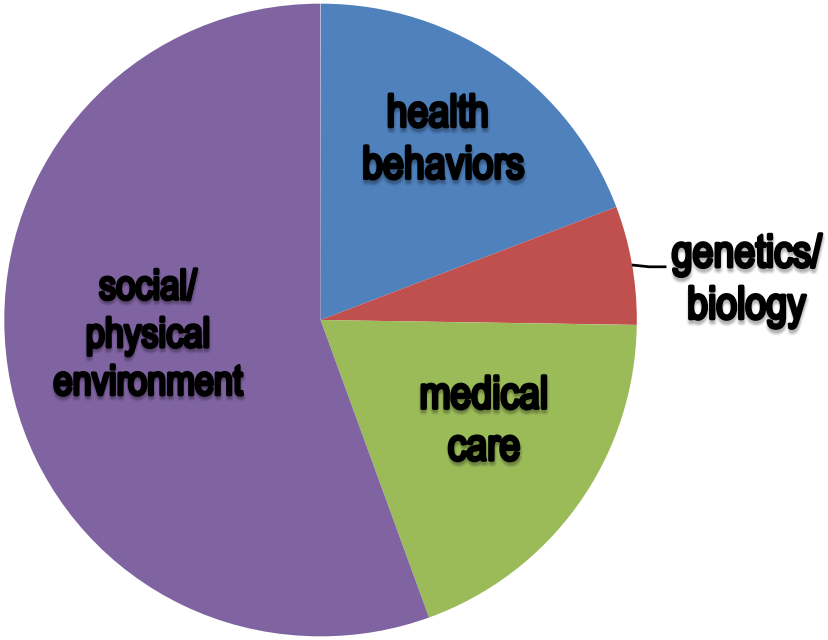
What are the health benefits of proper nutrition and physical activity?

Health Benefits

- Better Sleep
- Attention
- Learning Benefits
- Social behavior
- Self-Esteem
- Healthy weight
- Prevent chronic disease
- Increased Energy
- Mood

What Factors affect Obesity?

- Biology
  - Genes
- Behaviors
  - Diet
  - Physical activity
- Environments
  - Social
  - Physical



FOCUS ON WHAT WE CAN CHANGE!

Contributors to Childhood Obesity

- Eating patterns
- Parenting style
- Low-birth weight
- Excessive weight gain in pregnancy
- Formula feeding
- Food choices
- Physical activity
- Obese parents
- Parents with poor health behaviors
- Demographic factors

(Contributors in red are ones that can be controlled by parents)

Brainstorm

What factors in the environment make it harder for us to eat smart and move more?

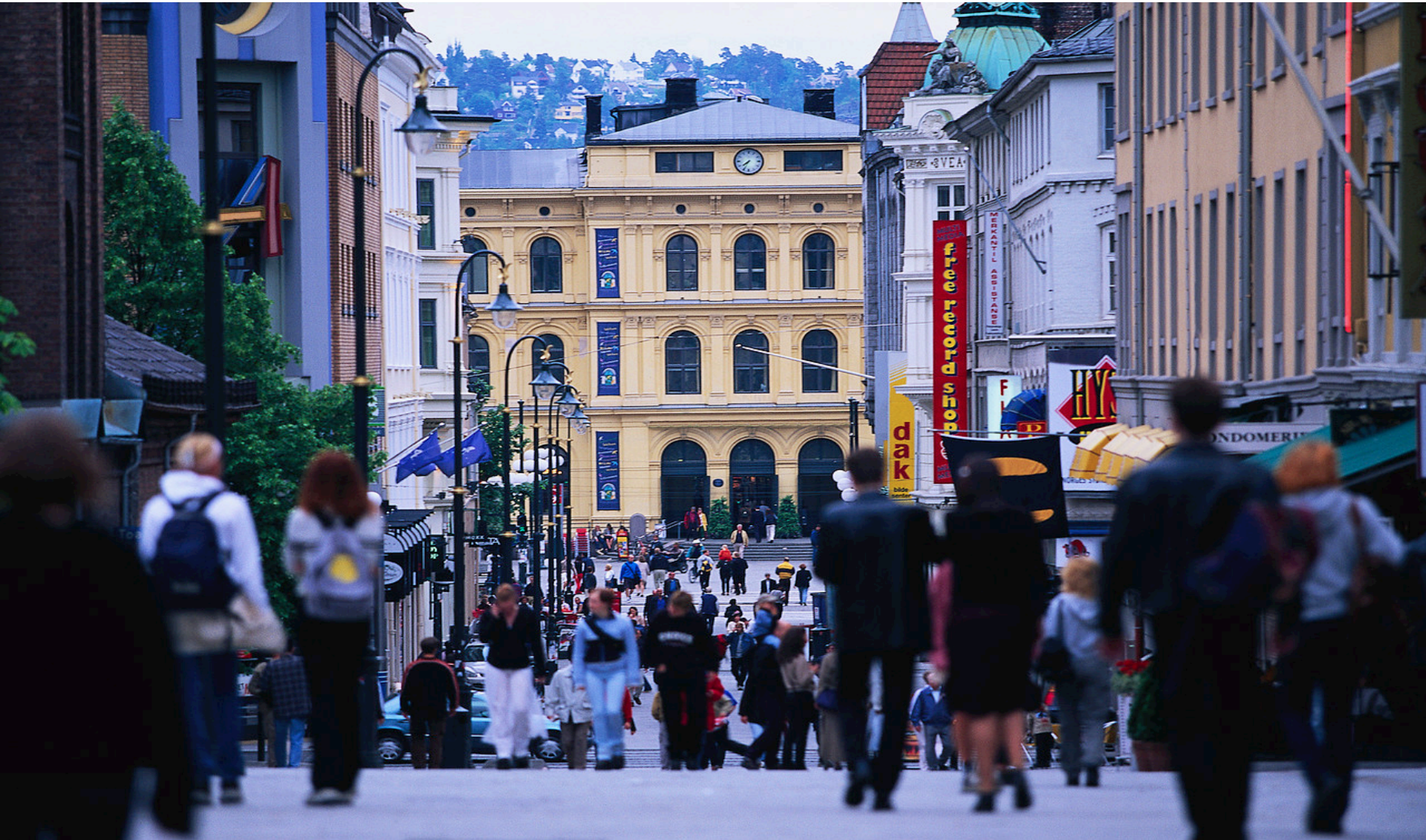
Environmental Factors

- Urban sprawl and time spent in cars
- The way our cities are designed
- Poor access to recreational facilities

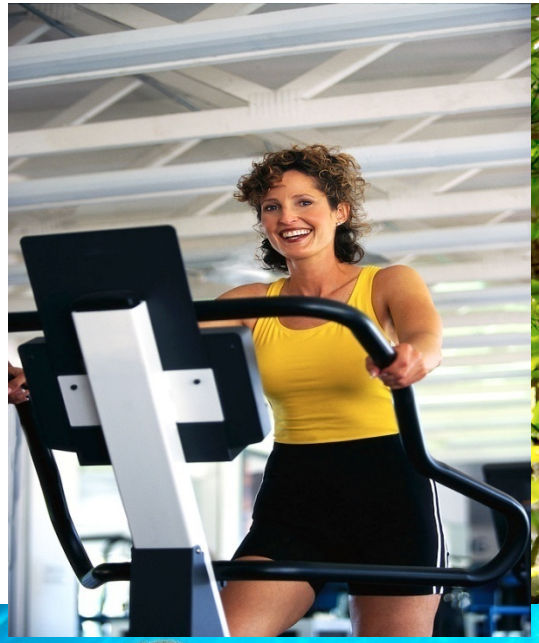
- Lack of parks and green spaces
- Density of fast food restaurants
- Presence of convenience store
- Price matters

Urban Sprawl & Time Spent in Cars

The Way Our Cities are Designed



Poor Access to Recreational Facilities



Lack of Parks and Green Spaces

Density of Fast Food Restaurants

Eating Away from Home Contributes to Portion Distortion

FRENCH FRIES

20 Years Ago

210 Calories
2.4 ounces

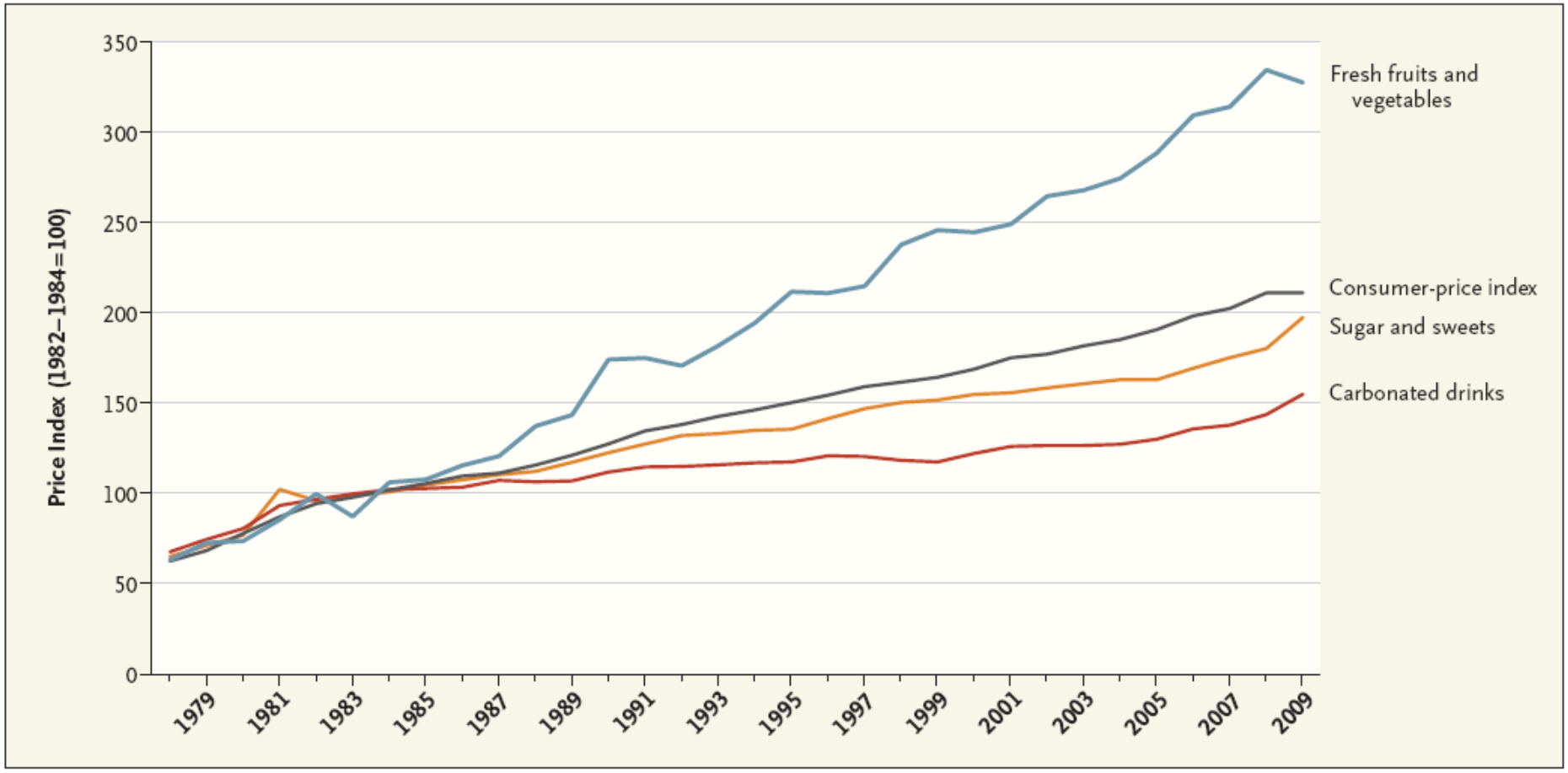
Today

610 Calories
6.9 ounces

Calorie Difference: 400 Calories!!

Presence of Convenience Stores and Absence of Grocery Stores

Price Matters



Relative Price Changes for Fresh Fruits and Vegetables, Sugars and Sweets, and Carbonated Drinks, 1978–2009.

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

Work

- Work environment that doesn’t support or encourage healthy eating or physical activity.

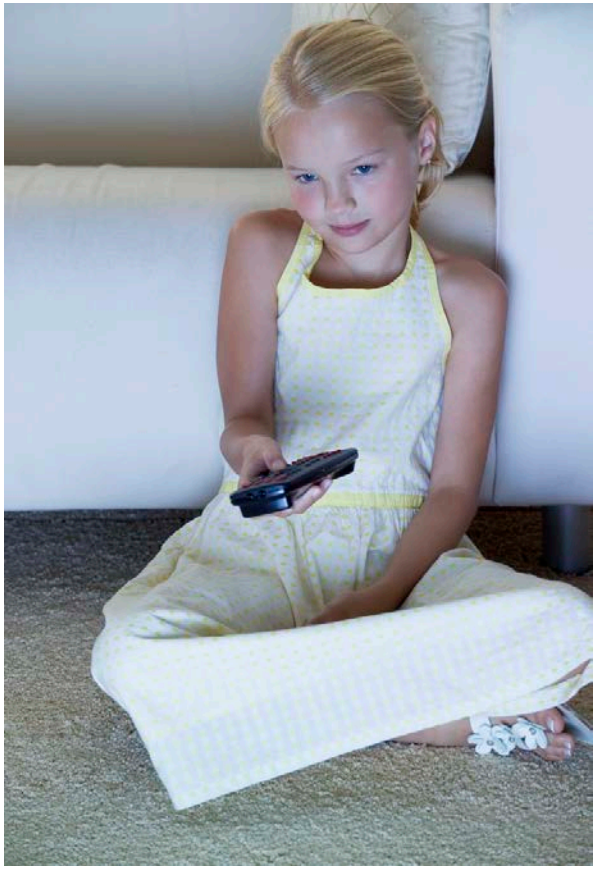
- Technology that makes work easier, but reduces physical activity.

Home

- Availability and *accessibility* of fruits & veggies and healthy snacks
- Family mealtime
- Family traditions
  - walks after dinner or watching TV
  - playing with the kids

Adults control what enters the home!

Home



- Time outdoors, especially for kids, has been shown to relate to physical activity
- Presence of exercise or play equipment
- Outdoor space for child play
- Media importance in home
- Number and location of TVs

Role of the Child Care Environment

- The Child care setting is ideal for promoting early development of health behaviors.
- As of 2012, there are nearly 11 million children under age 5 in the United States that are in some type of child care arrangement every week.

You can make a difference!

Child care providers are advocates for healthy children!!

What can you do to help prevent childhood obesity?

Focus on what we can change!

ACTIVITY

Complete the

"Improving YOUR Facility's

Nutrition & Physical Activity Environment"

Worksheet