

# Healthy Weight 101

## Module 1: Introduction to Healthy Weight

Presented by:

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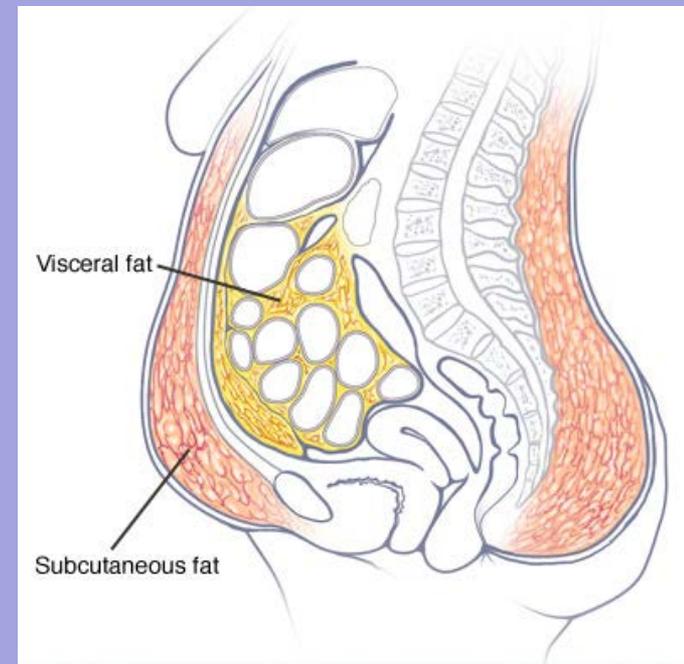
# Objectives

**By the end of this module, students will have learned. . .**

- An overview of weight
- What is a healthy weight?
- Over Weight or Obese?
- Health consequences
- Causes
- Who is diagnosed with obesity?
- Risk factors

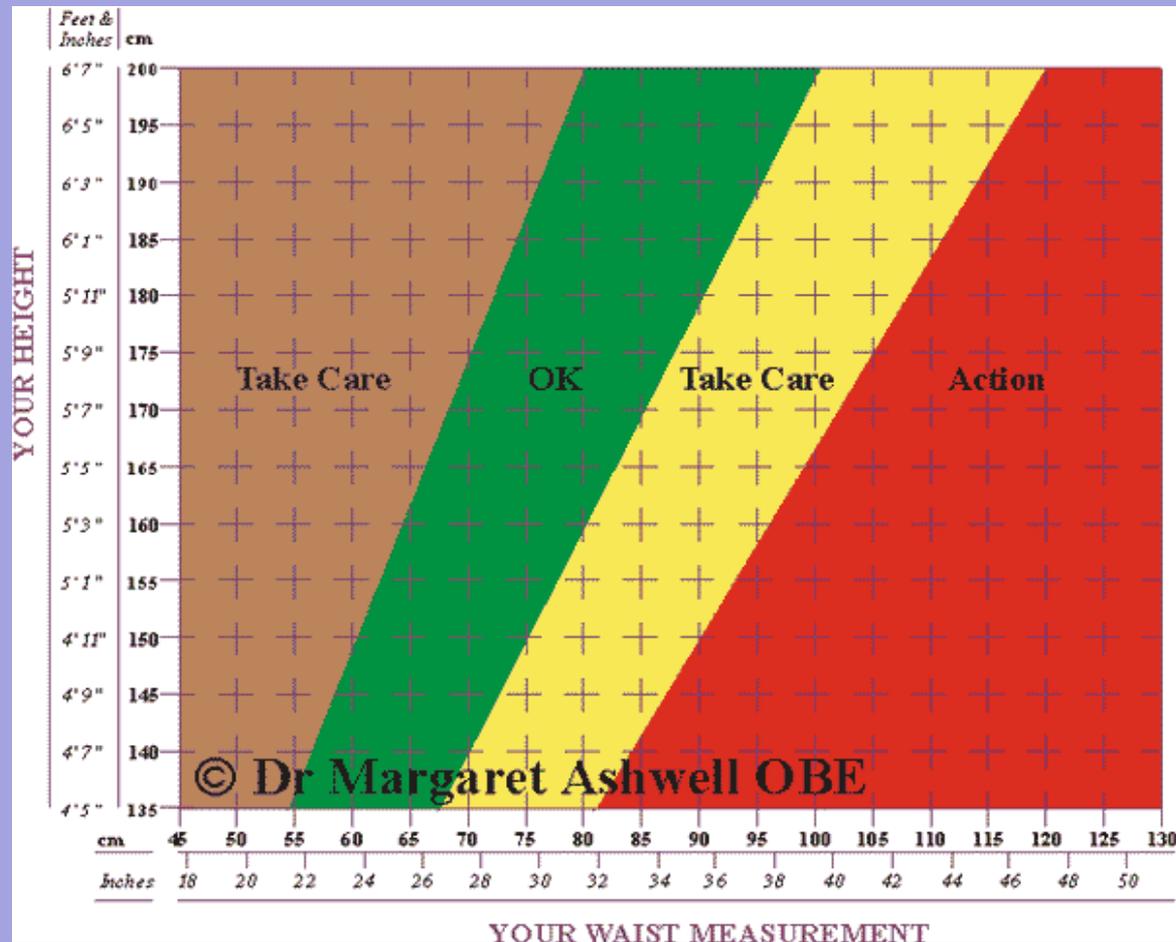
# Overview of Weight

- Body composition
  - water, bone, muscle, fat and tissue
- Fat (adipose tissue)
  - function
  - storage
  - visceral vs. subcutaneous
- Men vs. Women



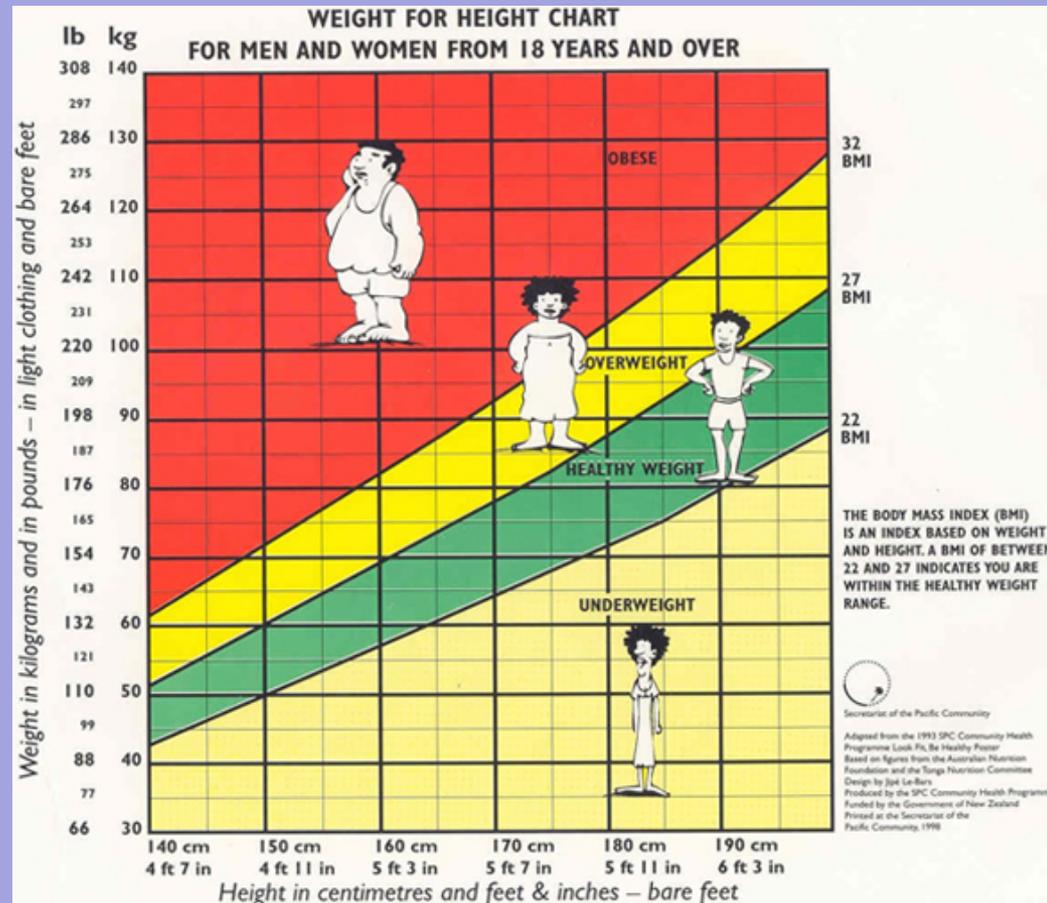
# What is a healthy weight?

- Waist to Height Ratio (WHtR)



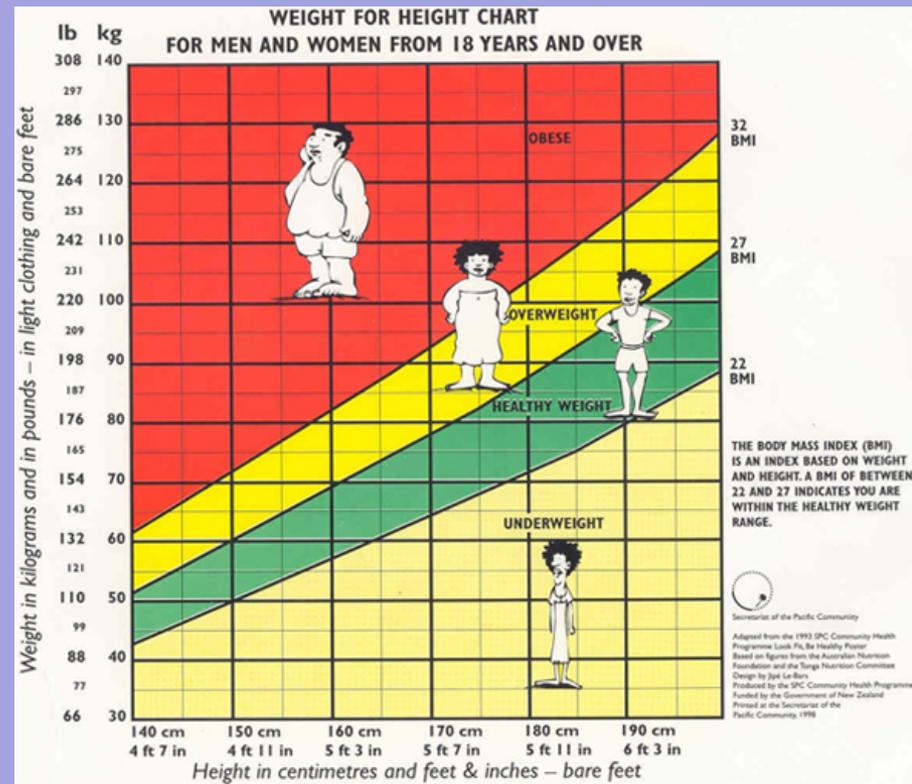
# What is a healthy weight?

- Body Mass Index
- Inaccuracies across ethnic groups



# What is a healthy weight?

- Overweight: 25 to 29.9
  - for Pacific Islanders: 27 to 32
- Obese: 30 or higher
  - Pacific Islanders: 32 or higher



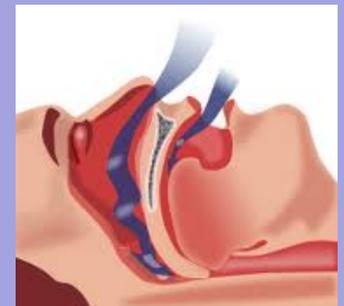
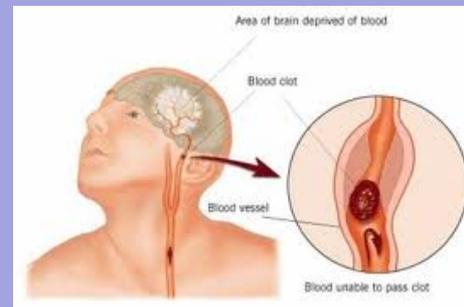
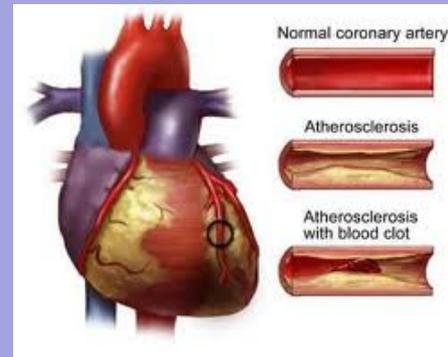


# Over-Weight or Obese?

- Difference between "over-weight" and "obese"
- BMI & WHtR ranges
- Links between BMI/WHtR & health risks
- Increases the chances of specific diseases and health problems
- Hawai'i averages

# Health Consequences

- High blood pressure or hypertension
- High blood cholesterol or dyslipidemia
- Type 2 diabetes
- Coronary heart disease or coronary artery disease
- Arthritis
- Limited mobility
- Cancer
- Sleep apnea
- Hernia



# Health Consequences

- Link between BMI and health risks
  - well established

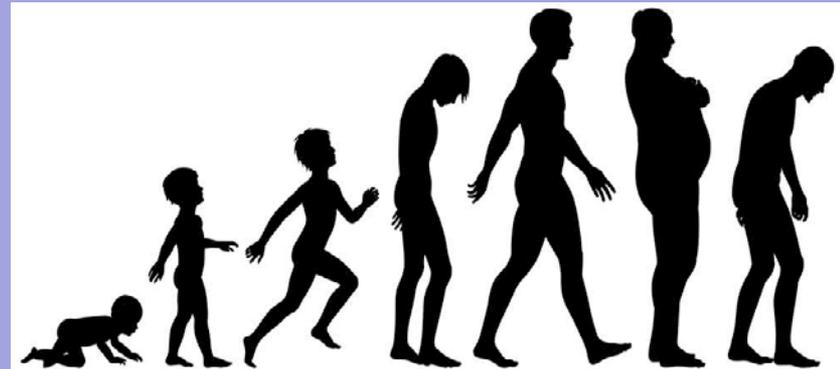


Where Your Fat is Stored Matters (HBO: The Weight of the Nation)

<http://www.youtube.com/watch?v=n6ynwRb2rR0>

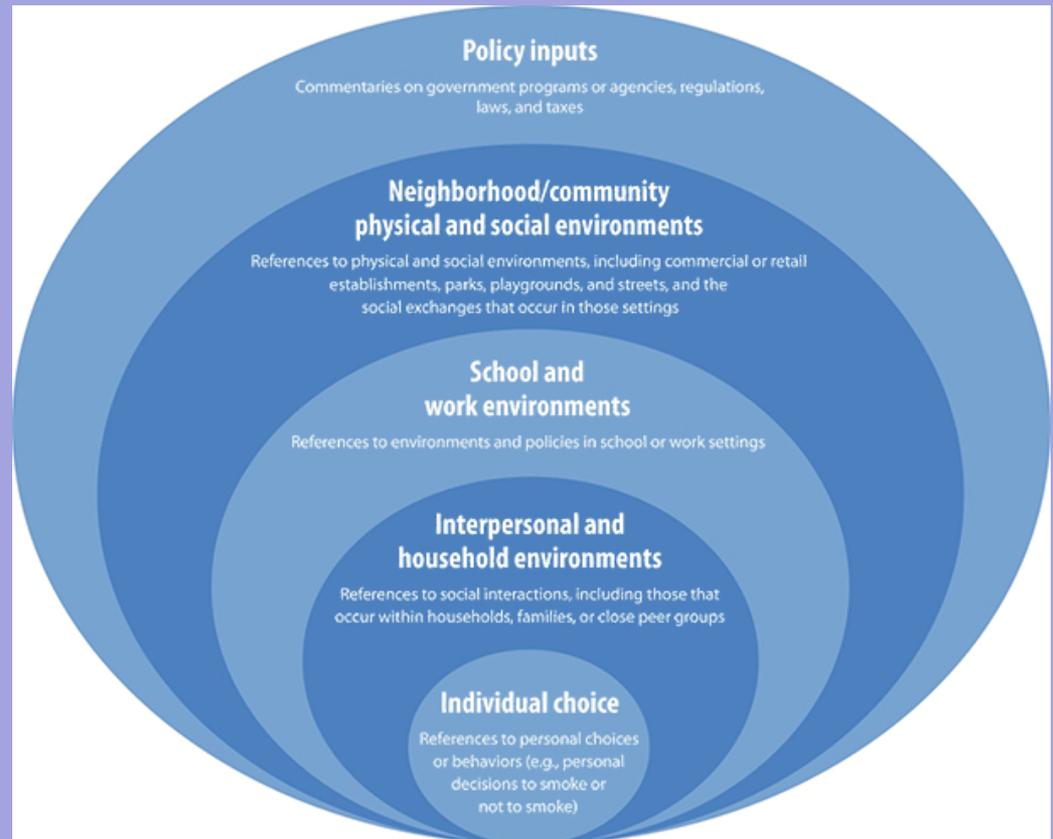
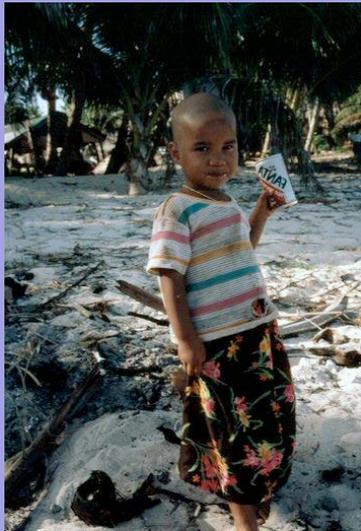
# Causes

- metabolism
- high vs. low muscle mass
- menopause
- pregnancy
- aging



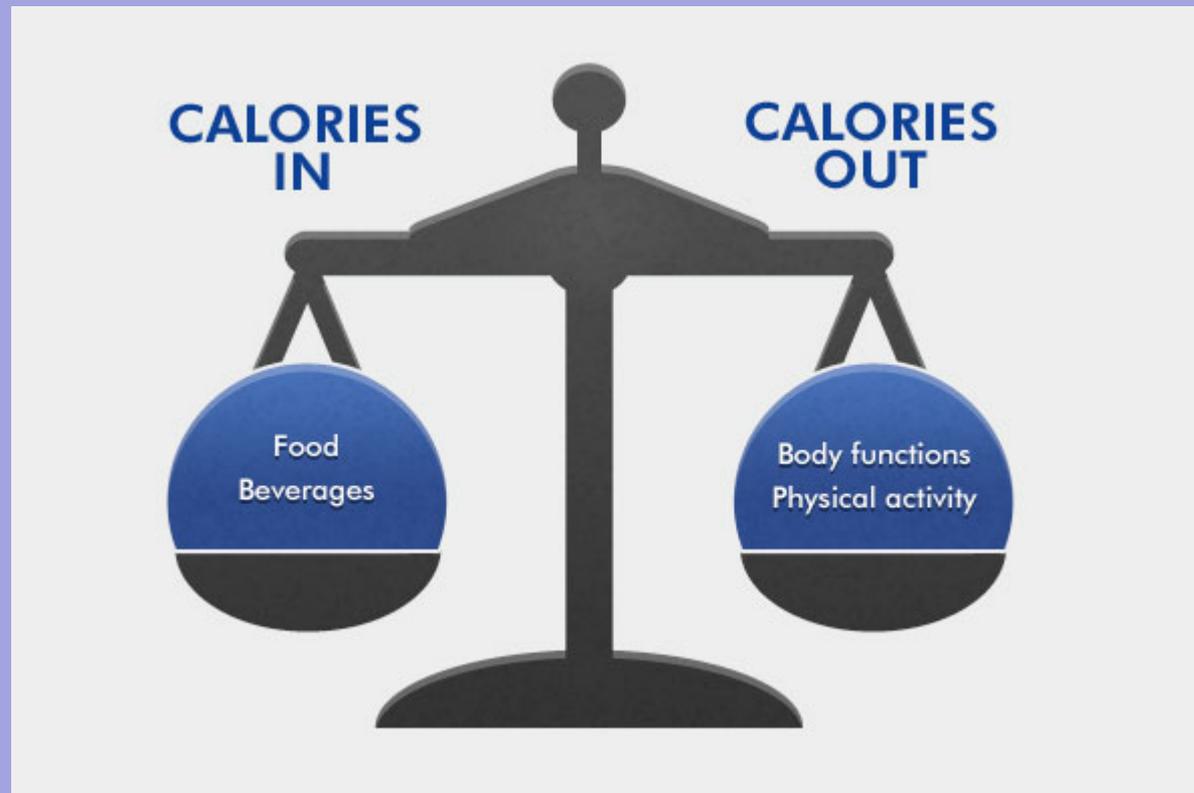
# Causes

- Many factors play a role → complex health issue to address



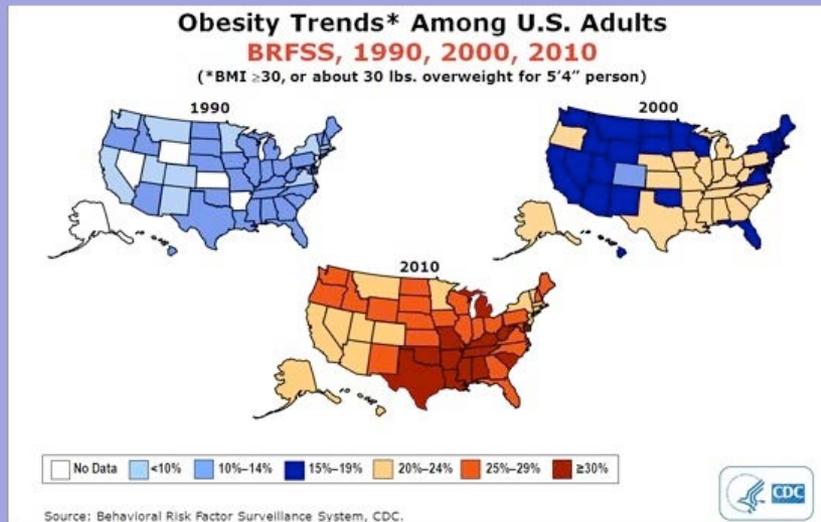
# Causes

- Energy imbalance
  - Eat too much and exercise too little



# Causes

- History – why are we so heavy now?
- U.S. patterns

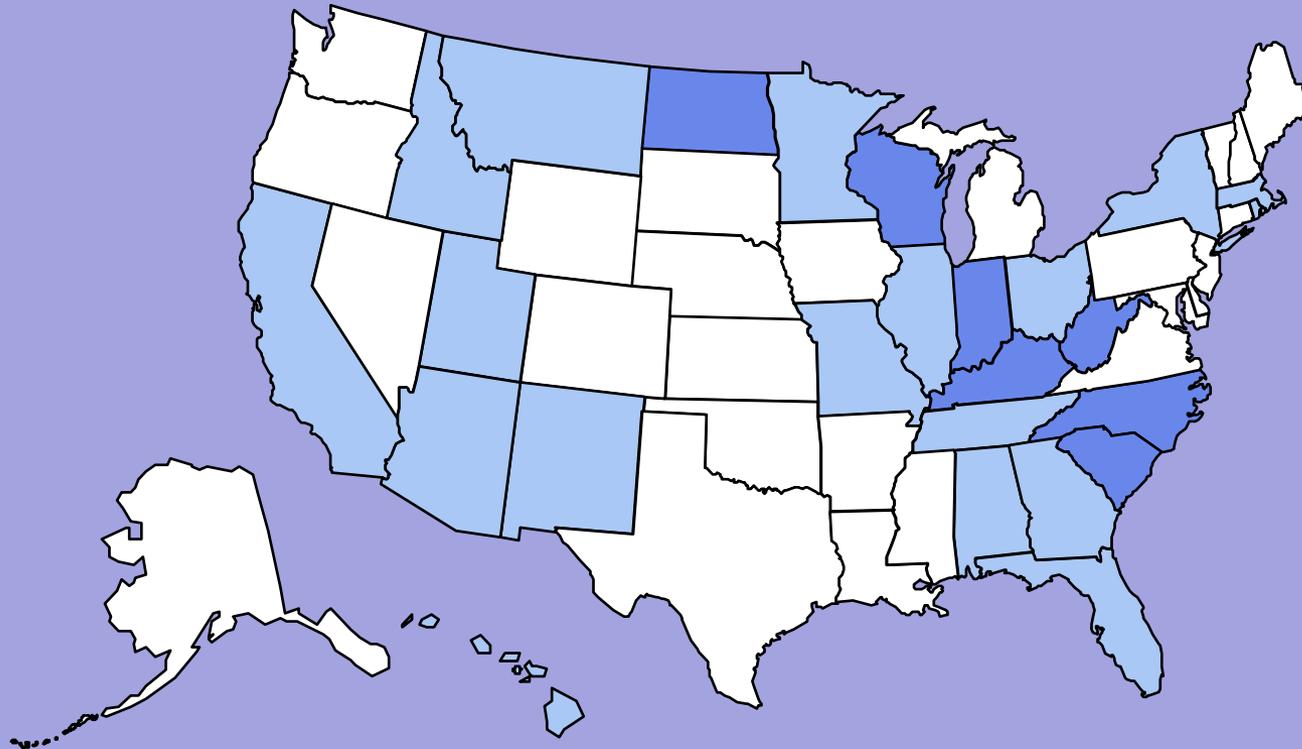




# Obesity Trends\* Among U.S. Adults

## BRFSS, 1986

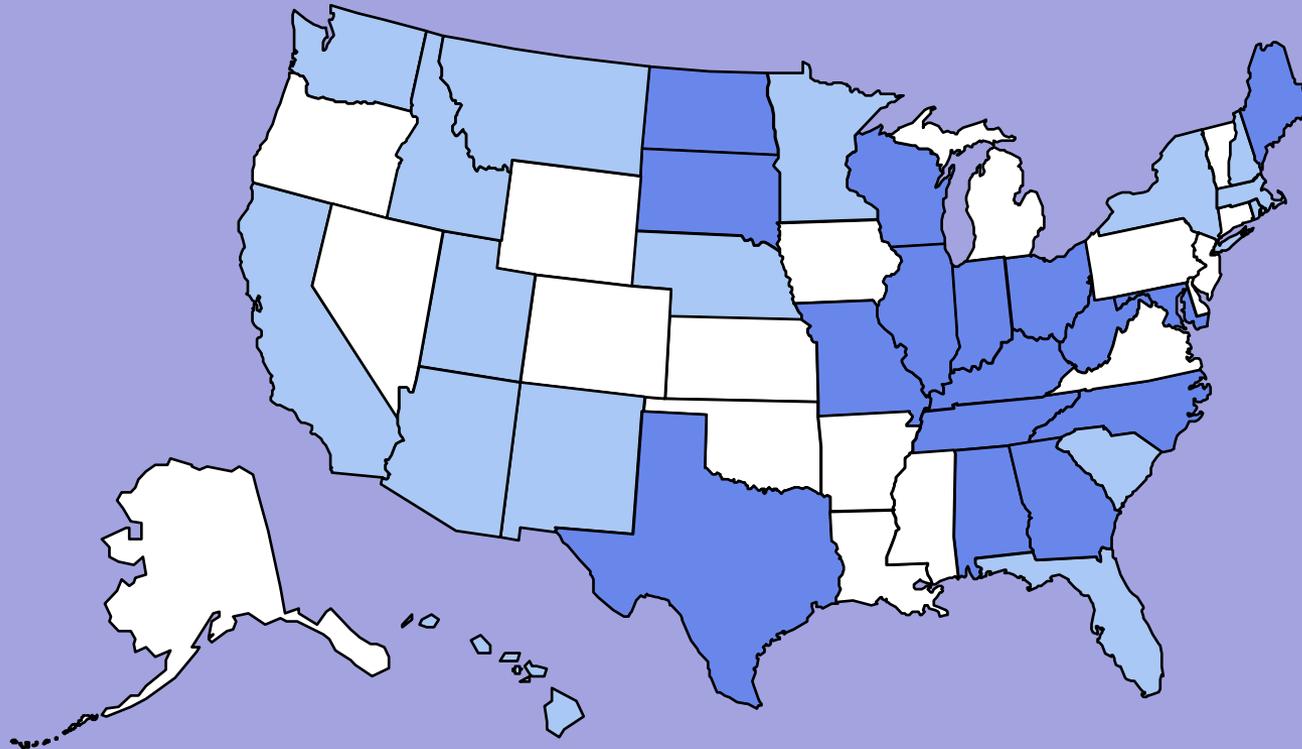
(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



# Obesity Trends\* Among U.S. Adults

## BRFSS, 1987

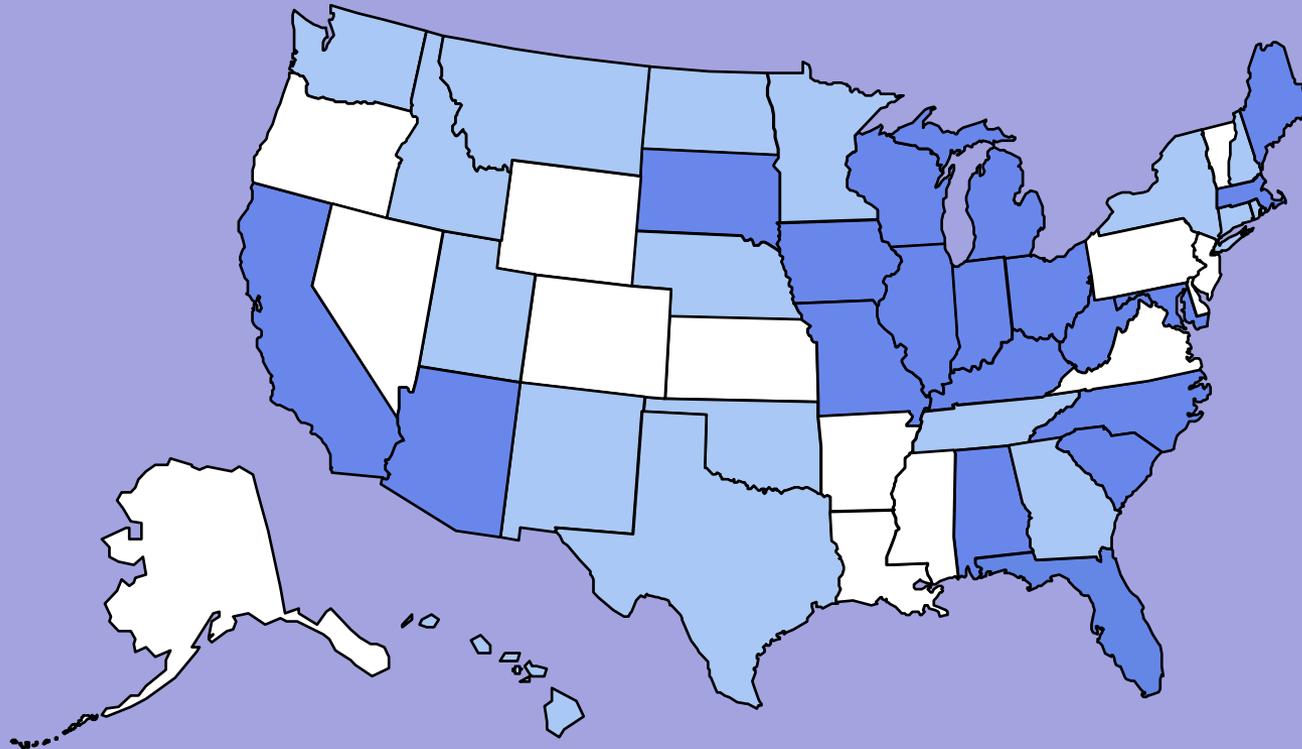
(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



# Obesity Trends\* Among U.S. Adults

## BRFSS, 1988

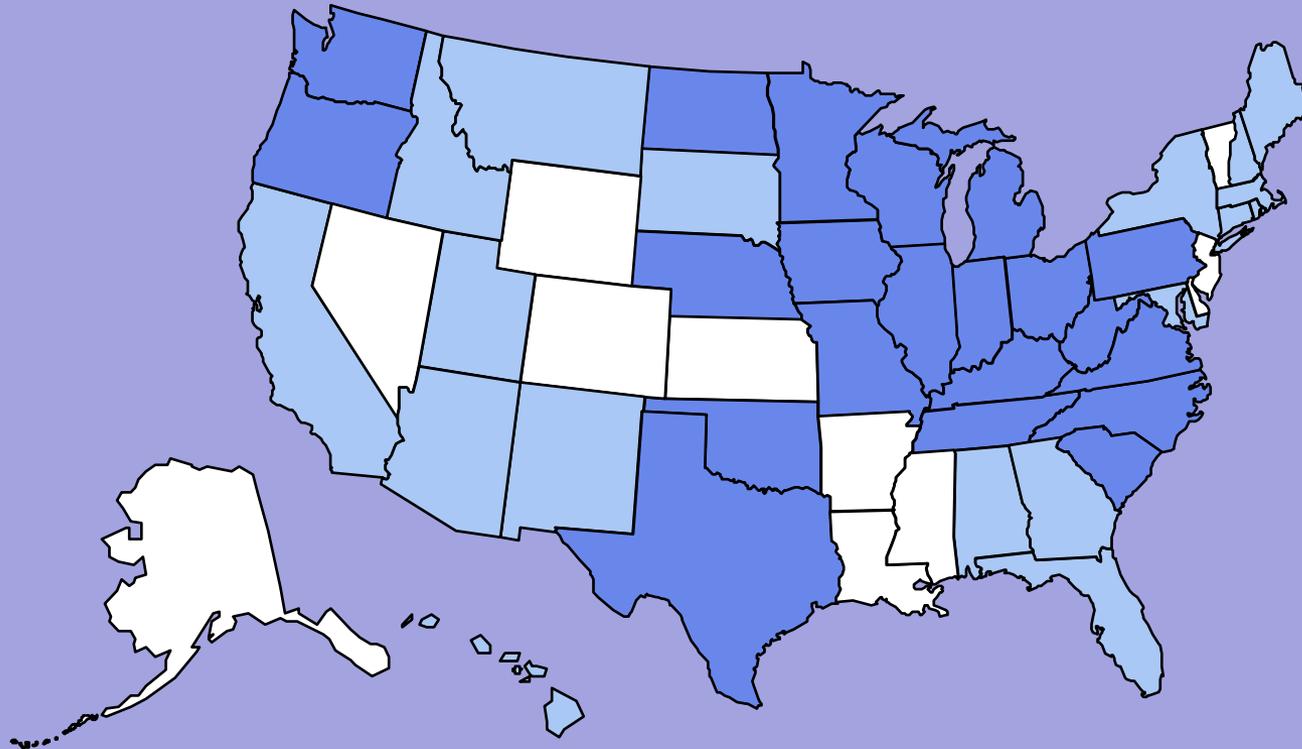
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# Obesity Trends\* Among U.S. Adults

## BRFSS, 1989

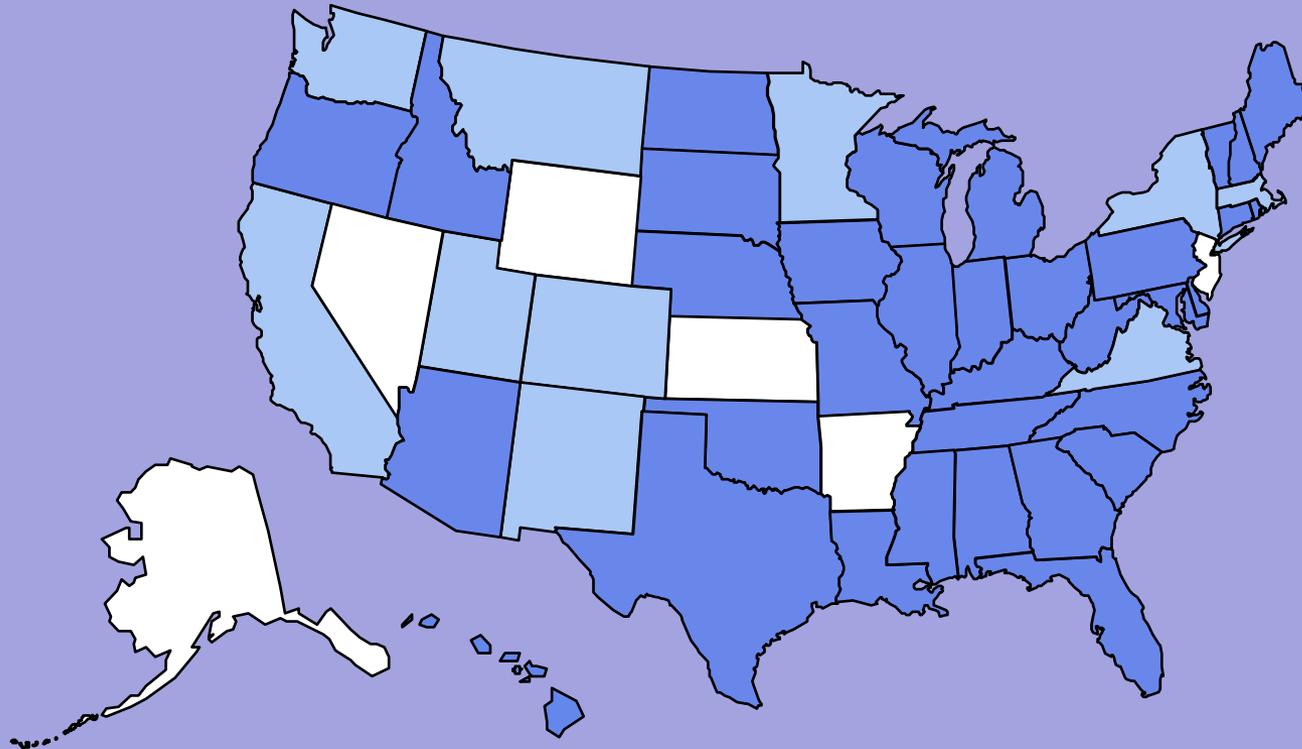
(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



# Obesity Trends\* Among U.S. Adults

## BRFSS, 1990

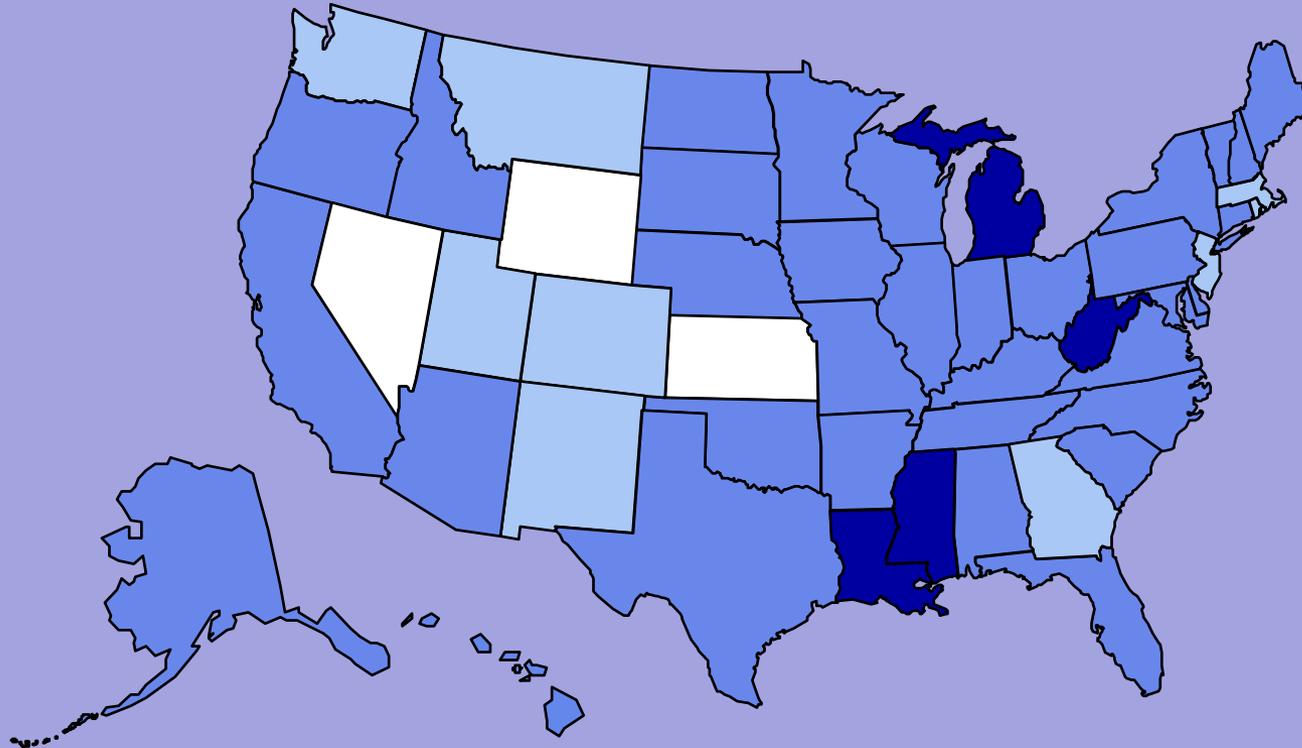
(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



# Obesity Trends\* Among U.S. Adults

## BRFSS, 1991

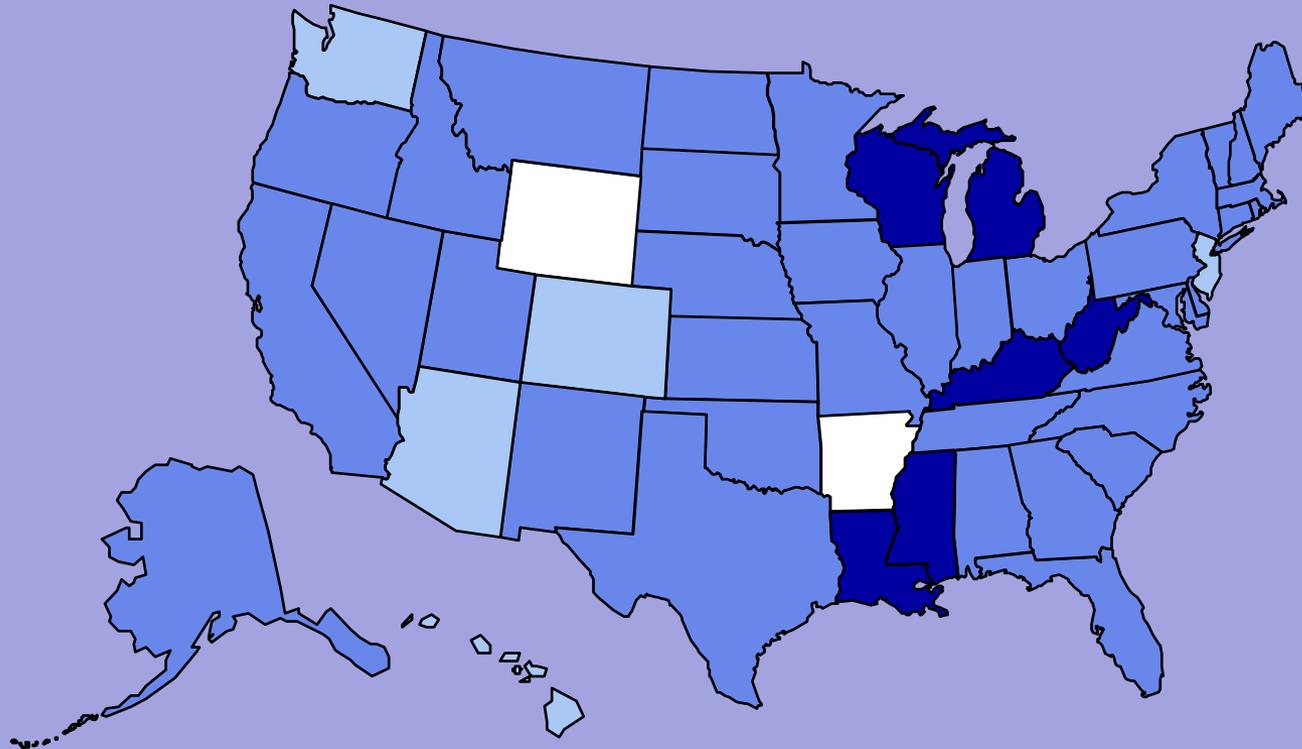
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# Obesity Trends\* Among U.S. Adults

## BRFSS, 1992

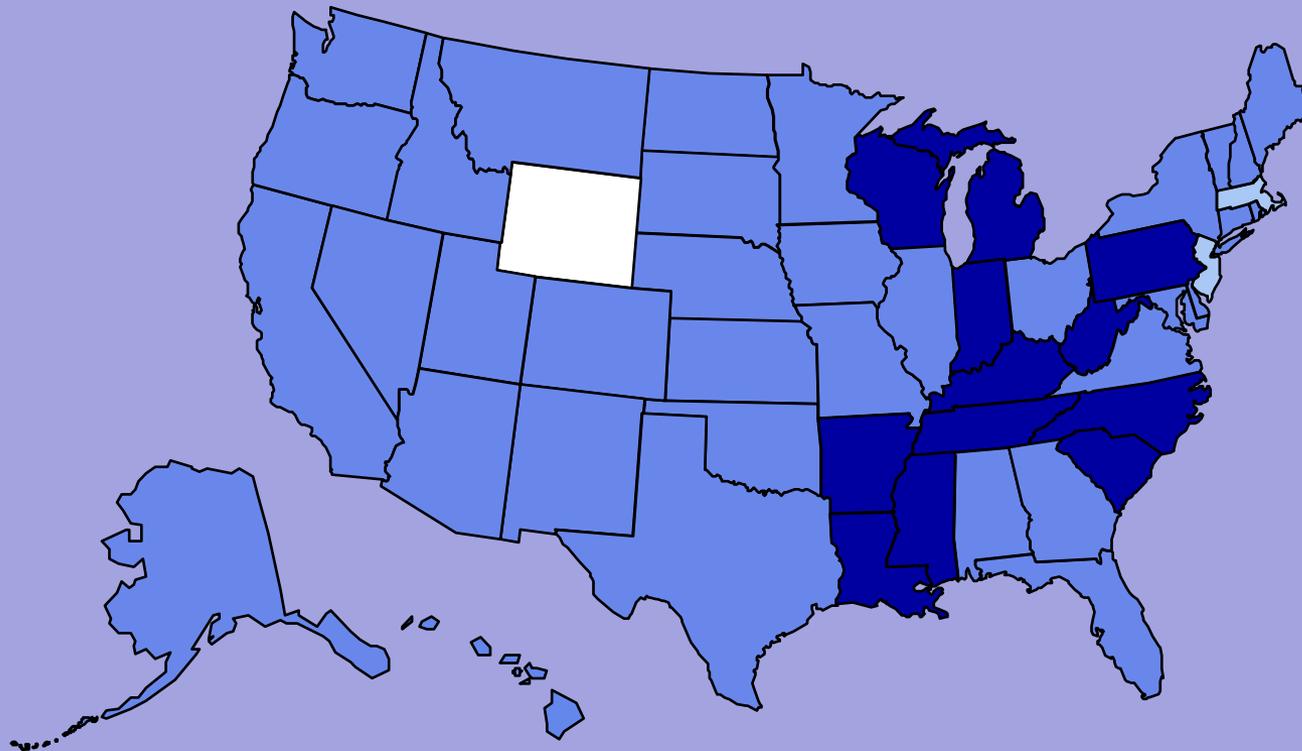
(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



# Obesity Trends\* Among U.S. Adults

## BRFSS, 1993

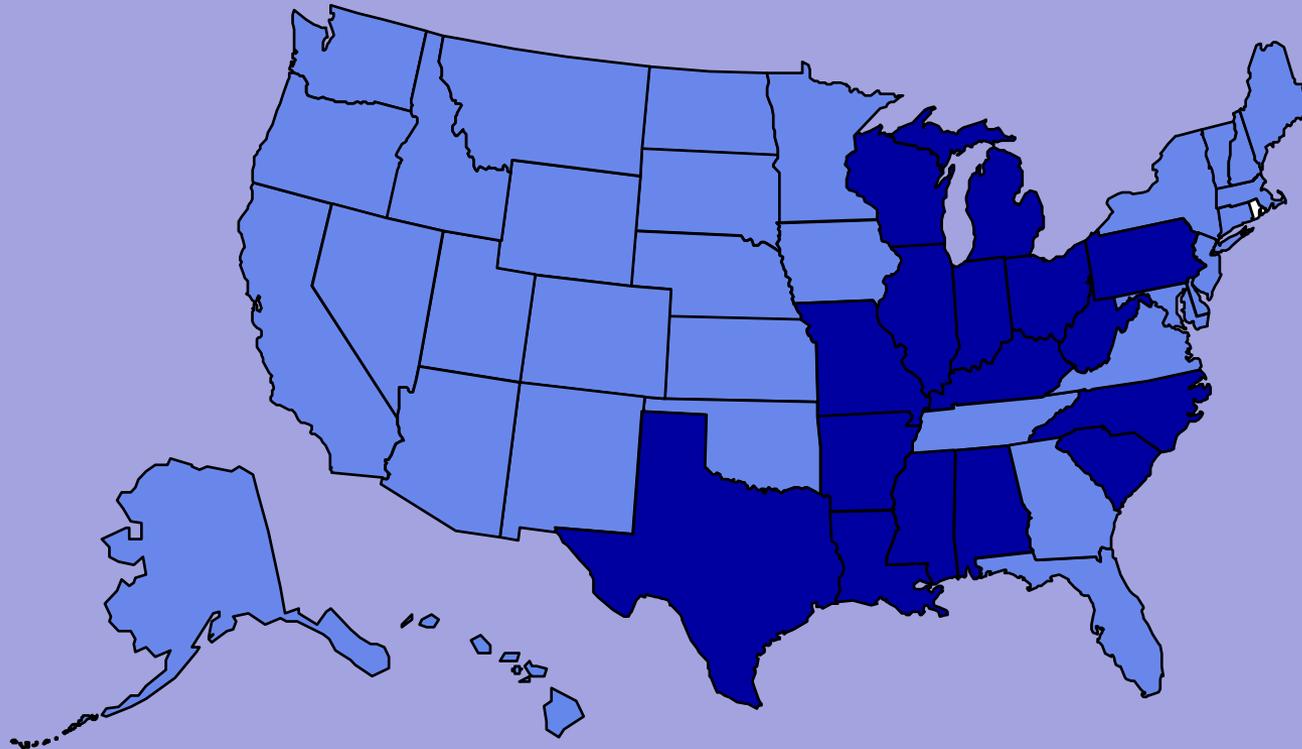
(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



# Obesity Trends\* Among U.S. Adults

## BRFSS, 1994

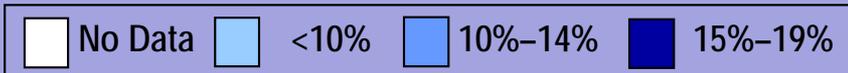
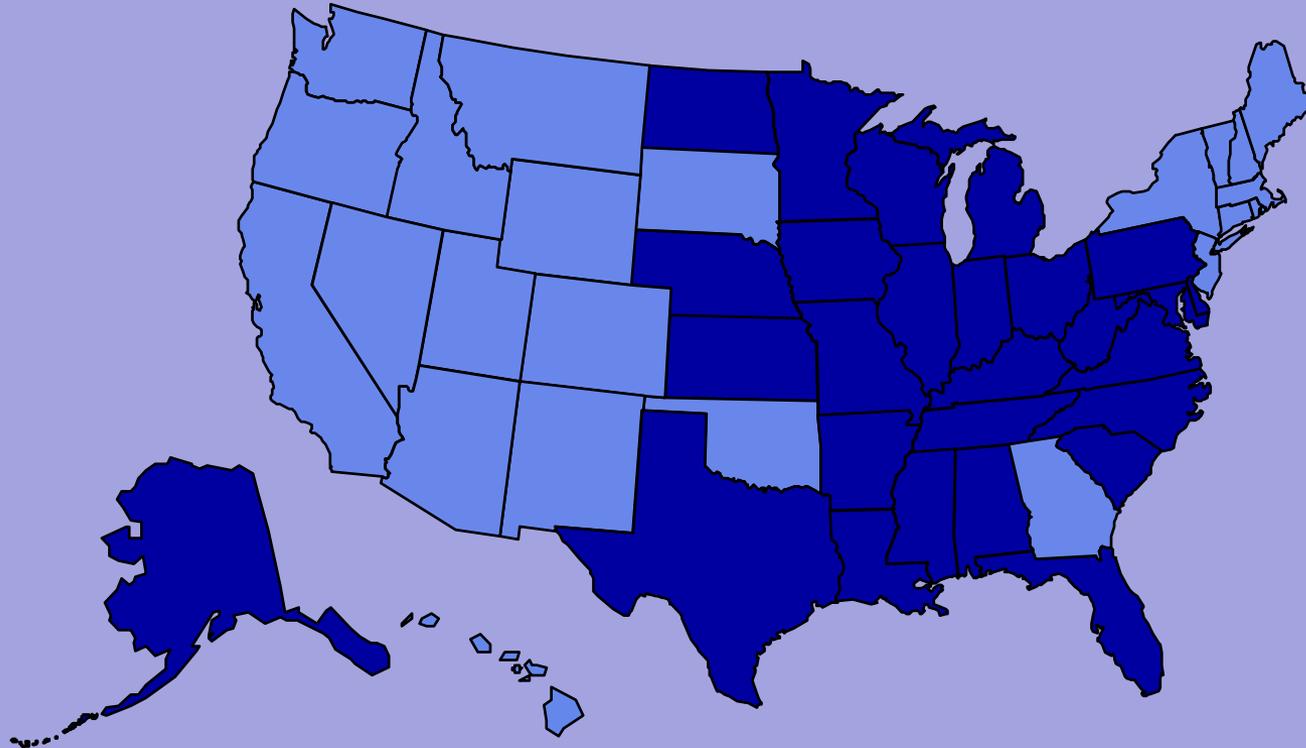
(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



# Obesity Trends\* Among U.S. Adults

## BRFSS, 1995

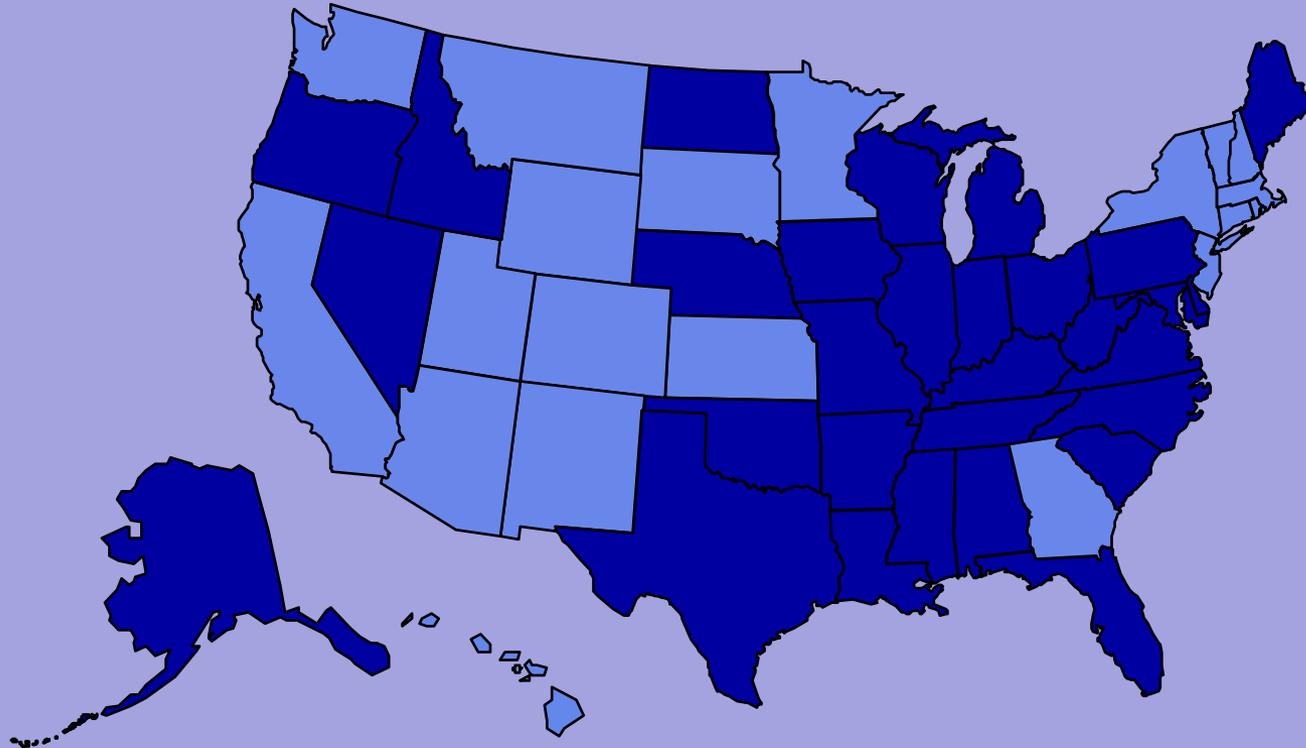
(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



# Obesity Trends\* Among U.S. Adults

## BRFSS, 1996

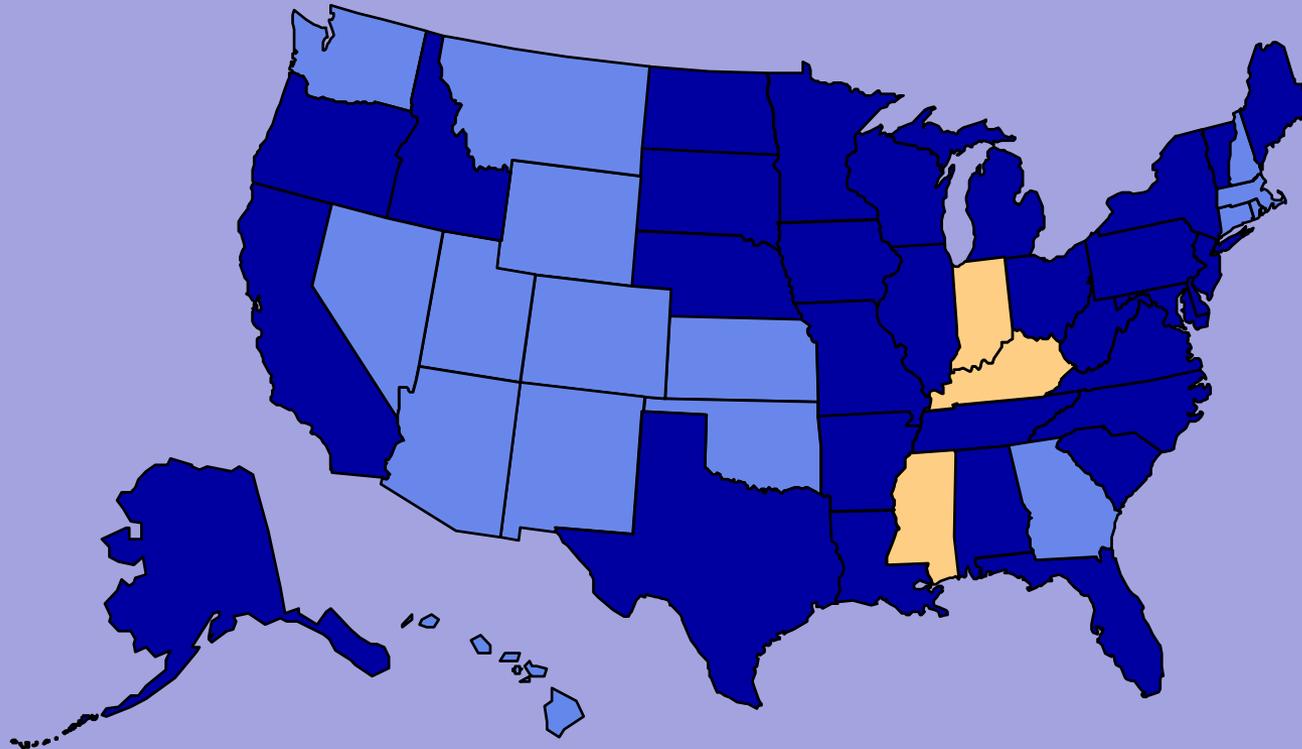
(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



# Obesity Trends\* Among U.S. Adults

## BRFSS, 1997

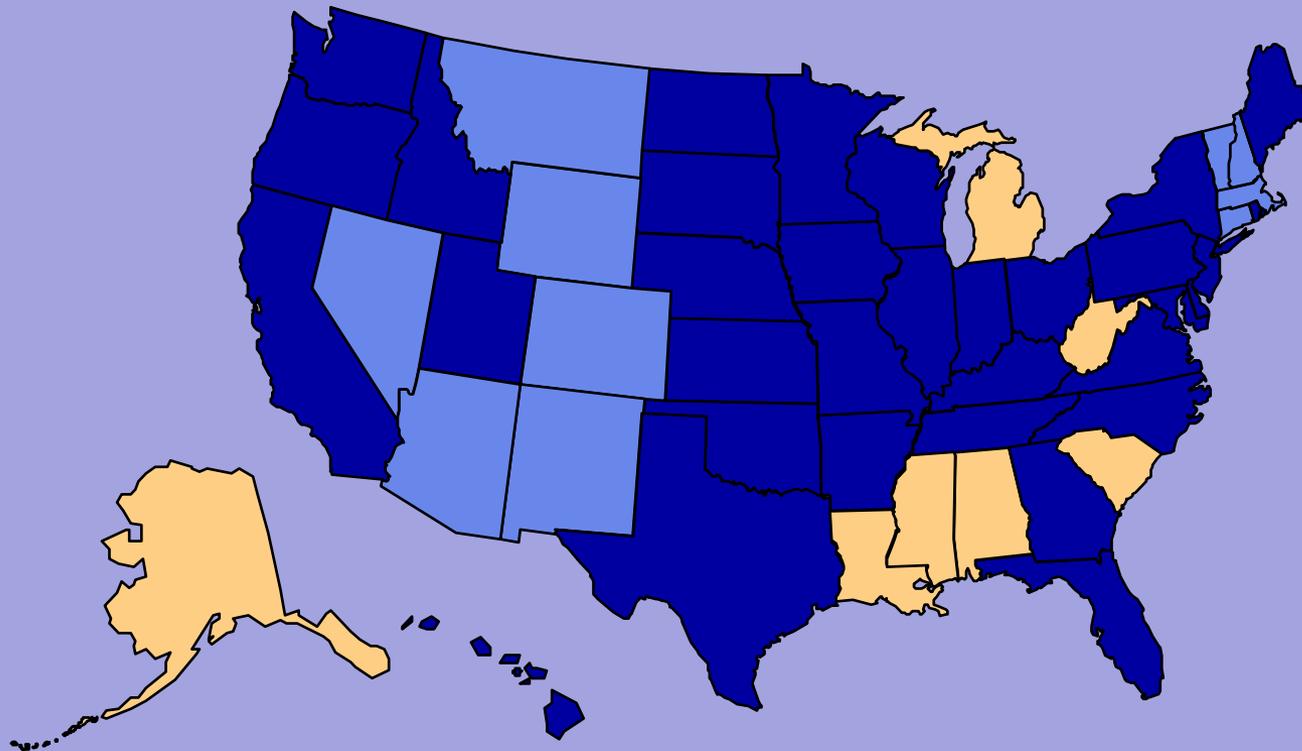
(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



# Obesity Trends\* Among U.S. Adults

## BRFSS, 1998

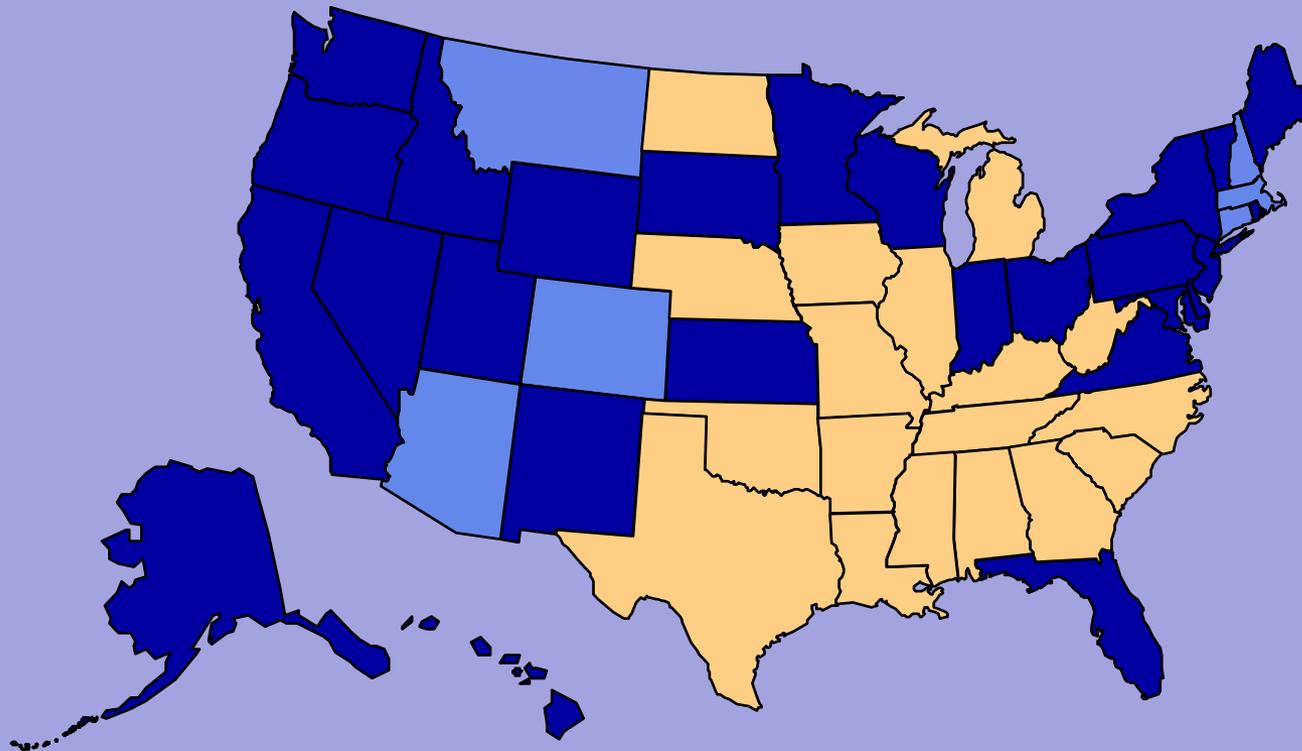
(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



# Obesity Trends\* Among U.S. Adults

## BRFSS, 1999

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

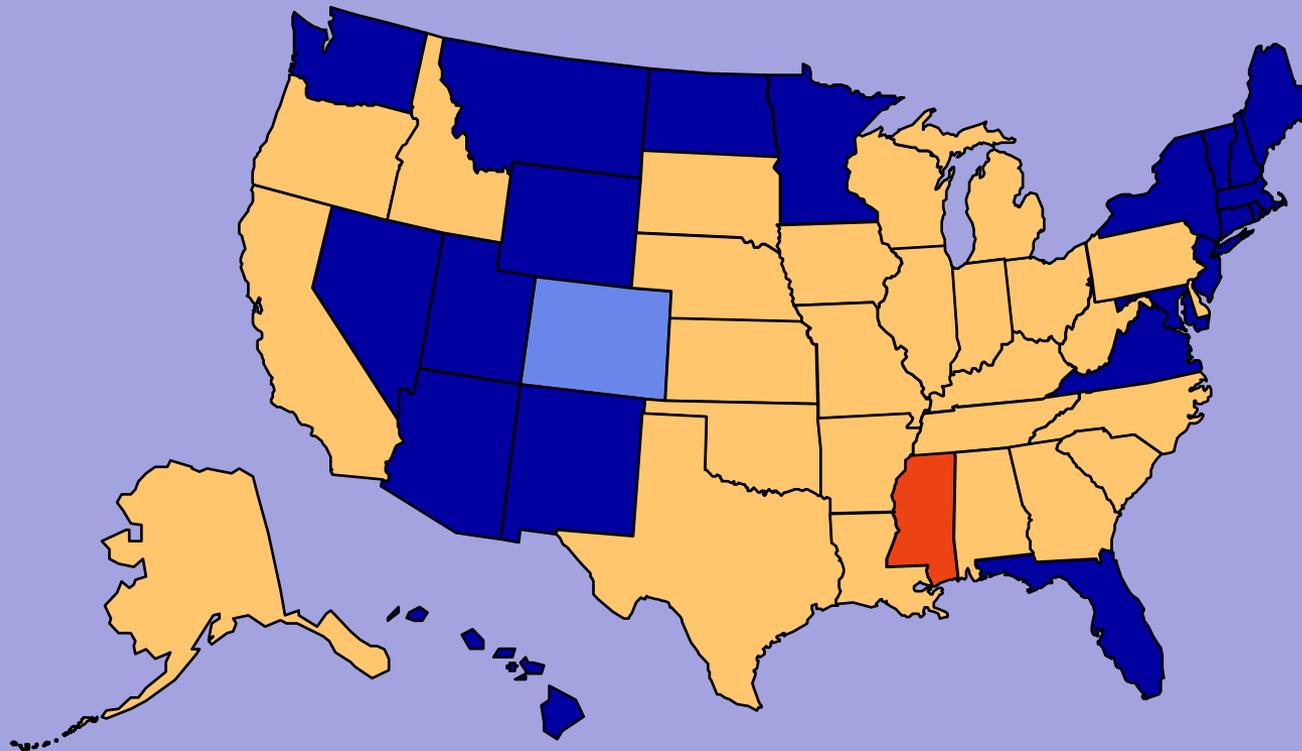




# Obesity Trends\* Among U.S. Adults

## BRFSS, 2001

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



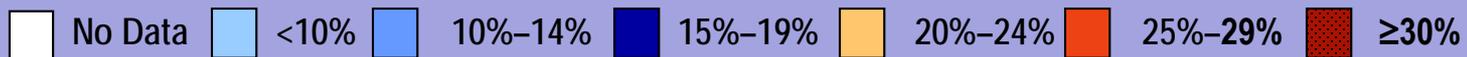
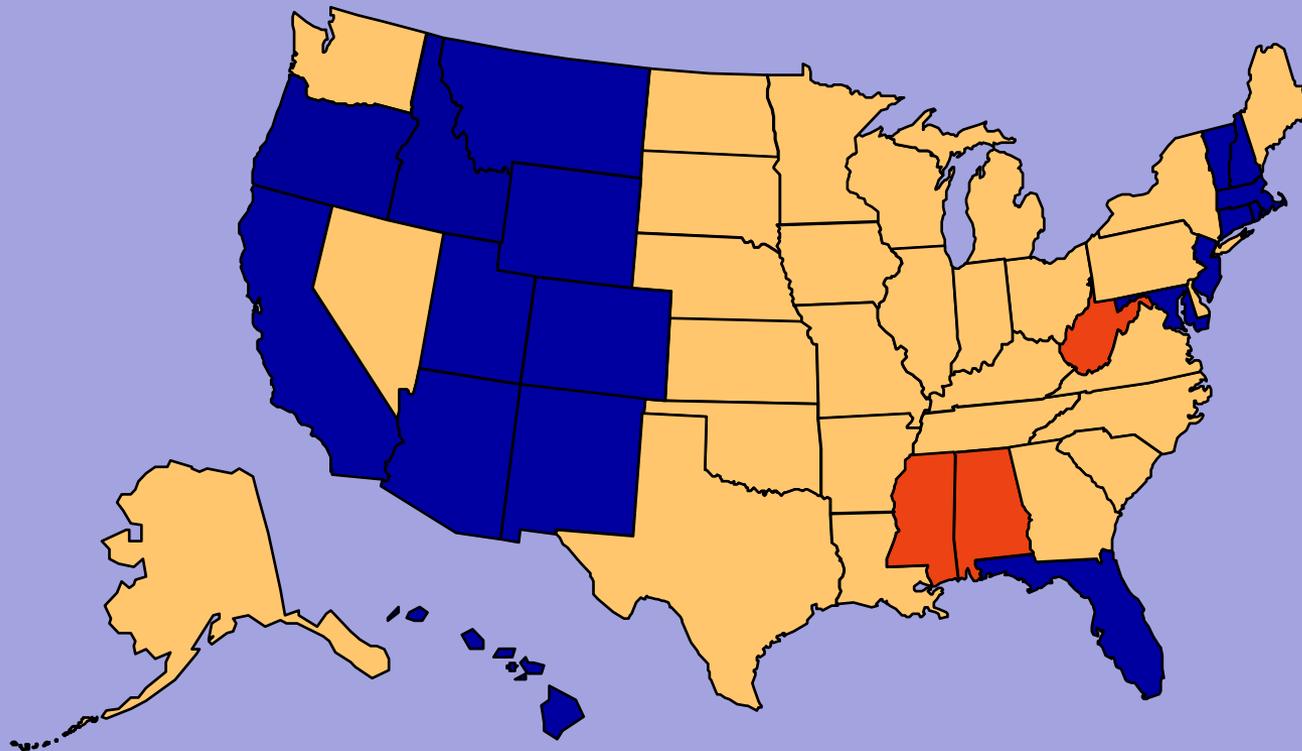
No Data   <10%   10%-14%   15%-19%   20%-24%   25%-29%



# Obesity Trends\* Among U.S. Adults

## BRFSS, 2002

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)

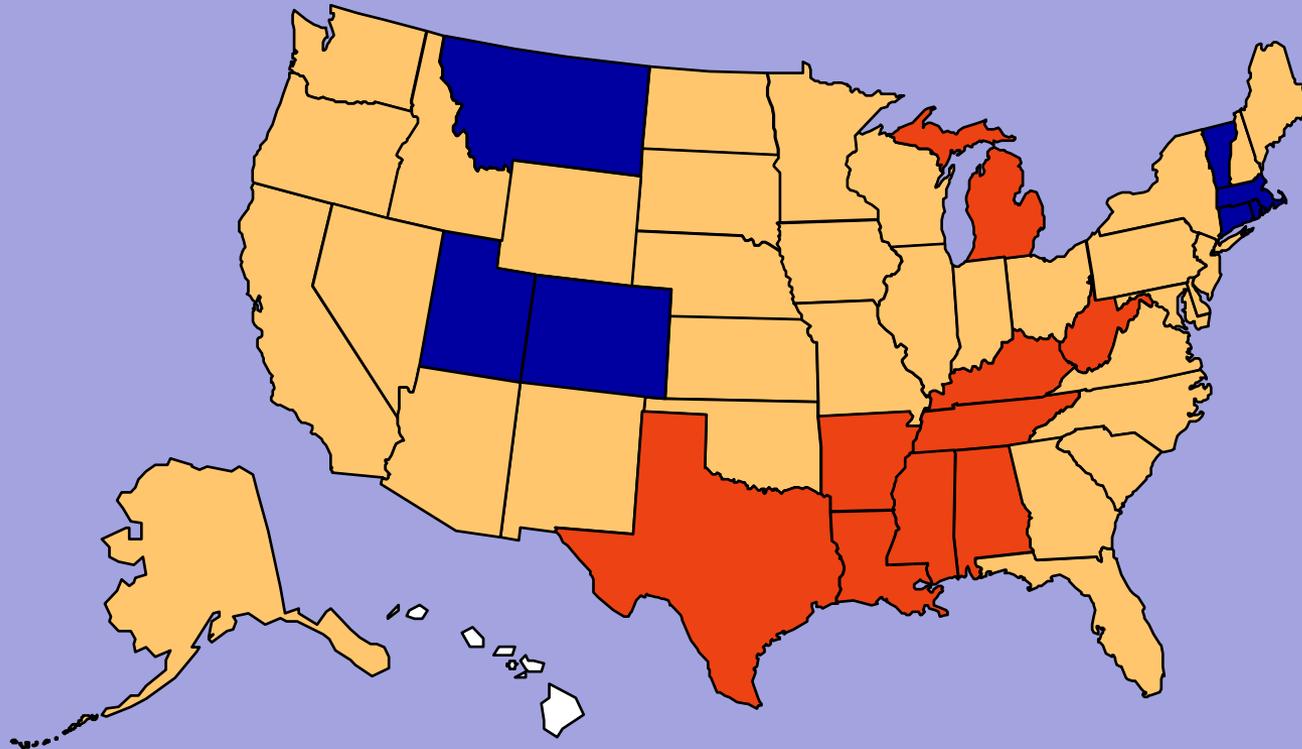




# Obesity Trends\* Among U.S. Adults

## BRFSS, 2004

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



Legend for obesity prevalence among U.S. adults (BRFSS, 2004):

No Data	<10%	10%–14%	15%–19%	20%–24%	25%–29%	$\geq 30\%$
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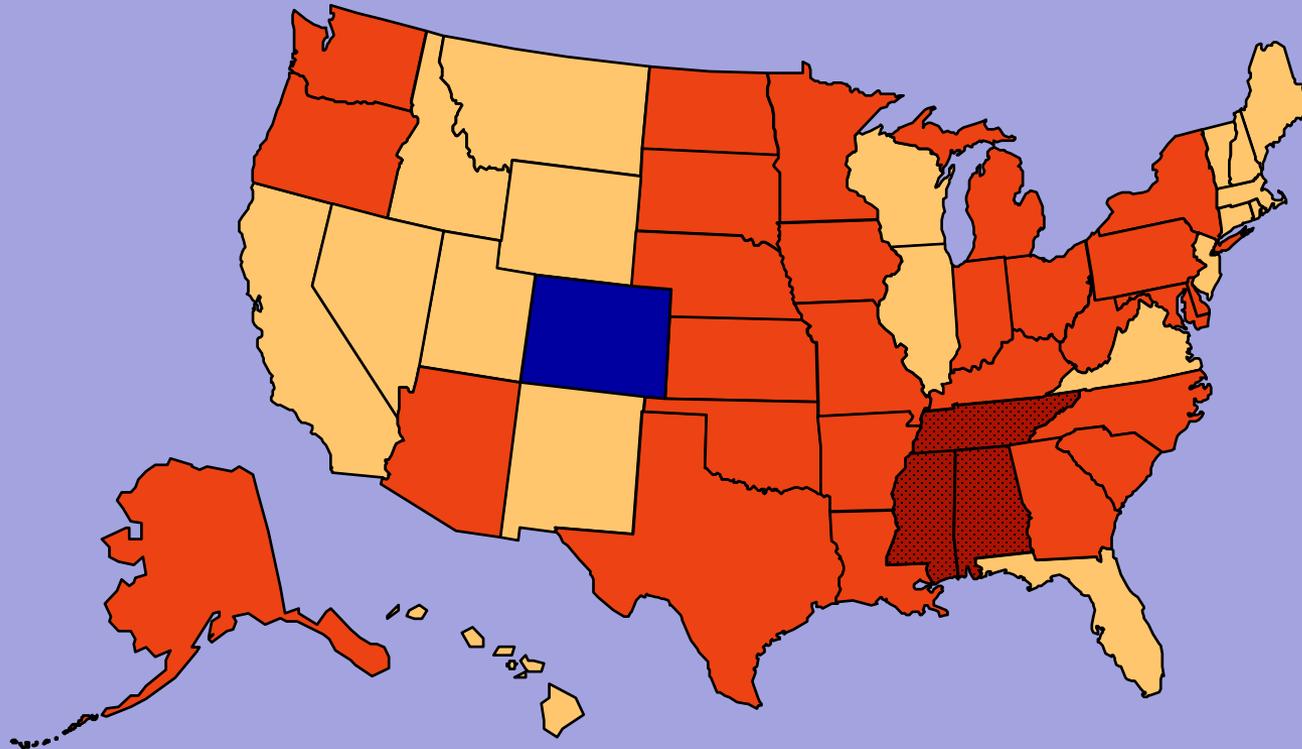




# Obesity Trends\* Among U.S. Adults

## BRFSS, 2007

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



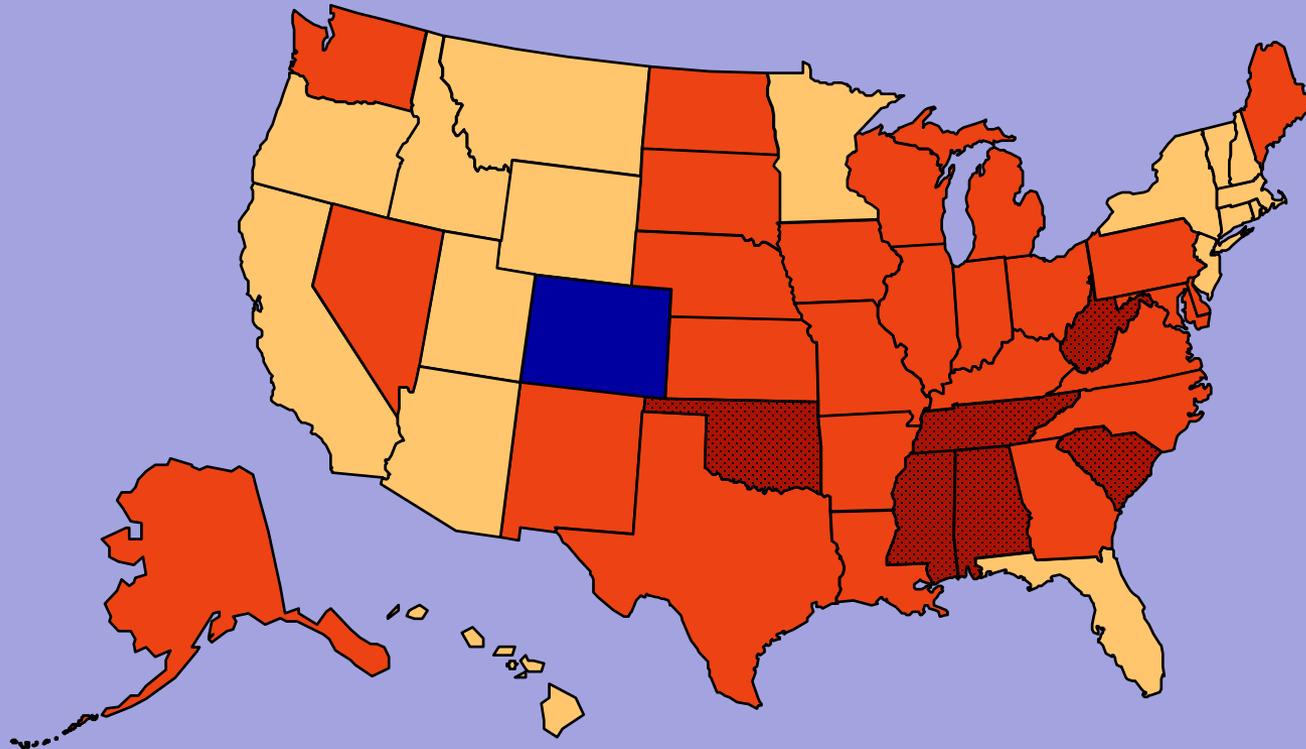
No Data <10% 10%–14% 15%–19% 20%–24% 25%–29%  $\geq 30\%$



# Obesity Trends\* Among U.S. Adults

## BRFSS, 2008

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5' 4" person)



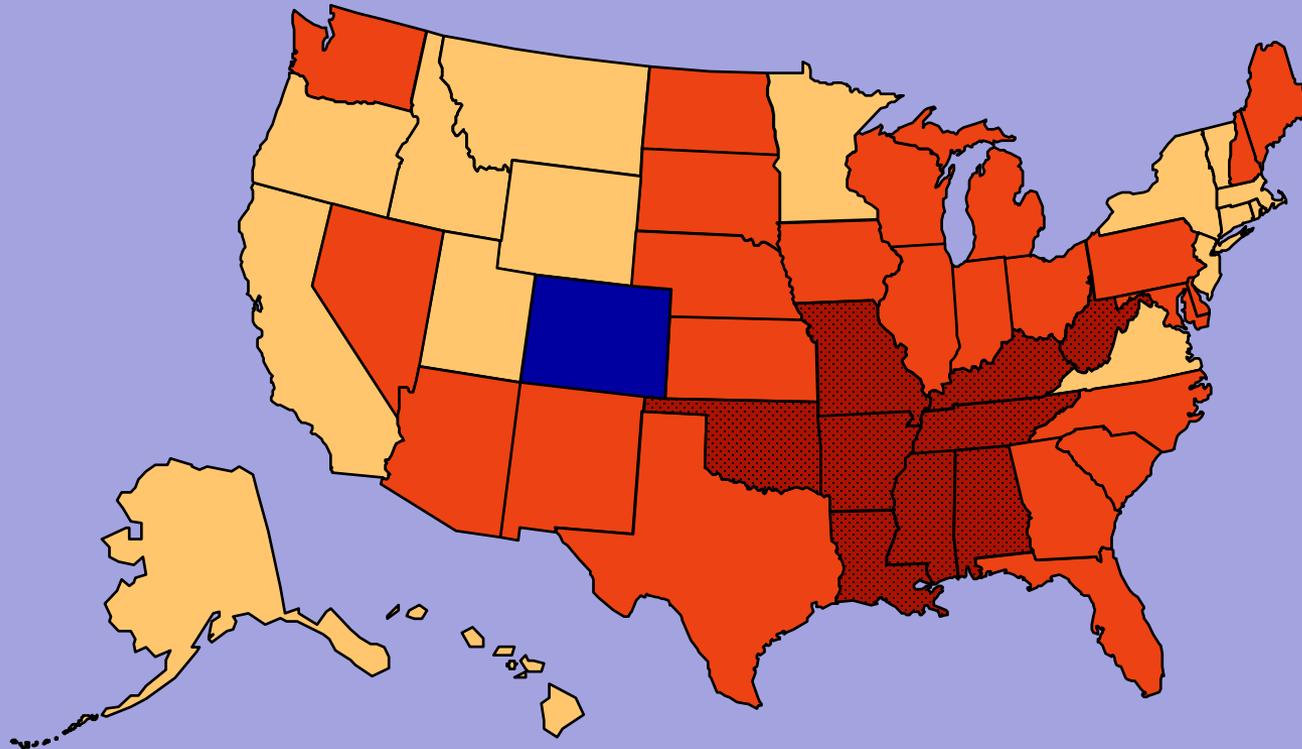
Legend: No Data, <10%, 10%–14%, 15%–19%, 20%–24%, 25%–29%,  $\geq 30\%$



# Obesity Trends\* Among U.S. Adults

## BRFSS, 2009

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5'4" person)



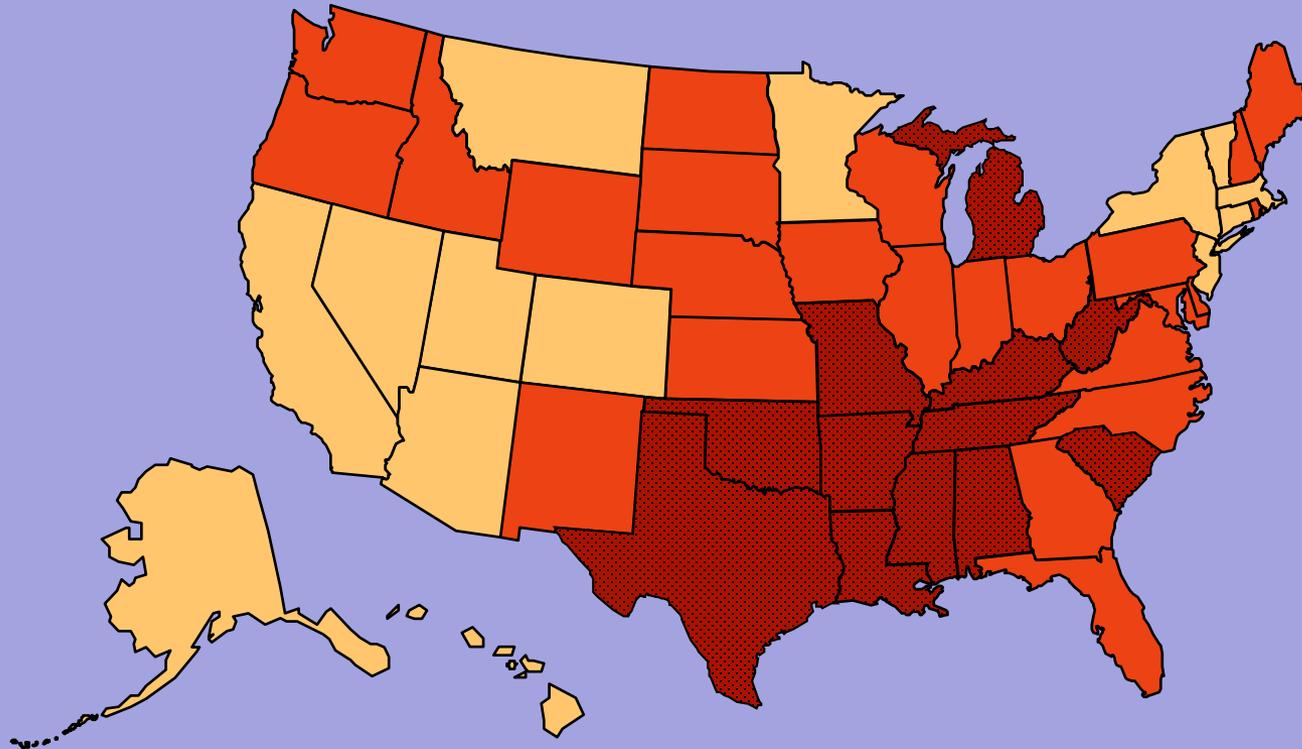
No Data <10% 10%–14% 15%–19% 20%–24% 25%–29%  $\geq 30\%$



# Obesity Trends\* Among U.S. Adults

## BRFSS, 2010

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs. overweight for 5'4" person)



Legend: No Data, <10%, 10%–14%, 15%–19%, 20%–24%, 25%–29%,  $\geq 30\%$





Who becomes obese?



# Obesity and Native Hawaiians & other Pacific Islanders (NHOPI)

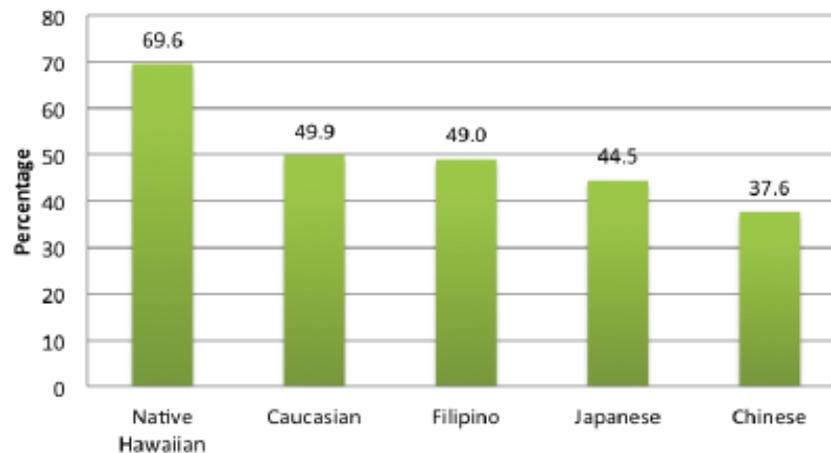
- Where do we carry our weight?
- What makes us susceptible to weight increase?
  - access
  - behavior
- Obesity culture
  - condition normalized
  - coping mechanism
  - difficult to discuss



# Obesity and Native Hawaiians & other Pacific Islanders (NHOPI)

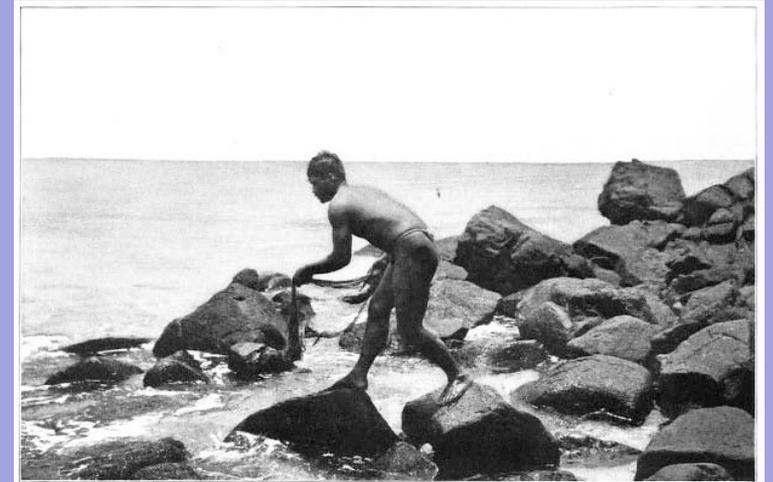
- State averages
- Compared with Asians, NHOPI are:
- Compared with Whites, NHOPI are:

Rates for Obesity by Ethnicity \*



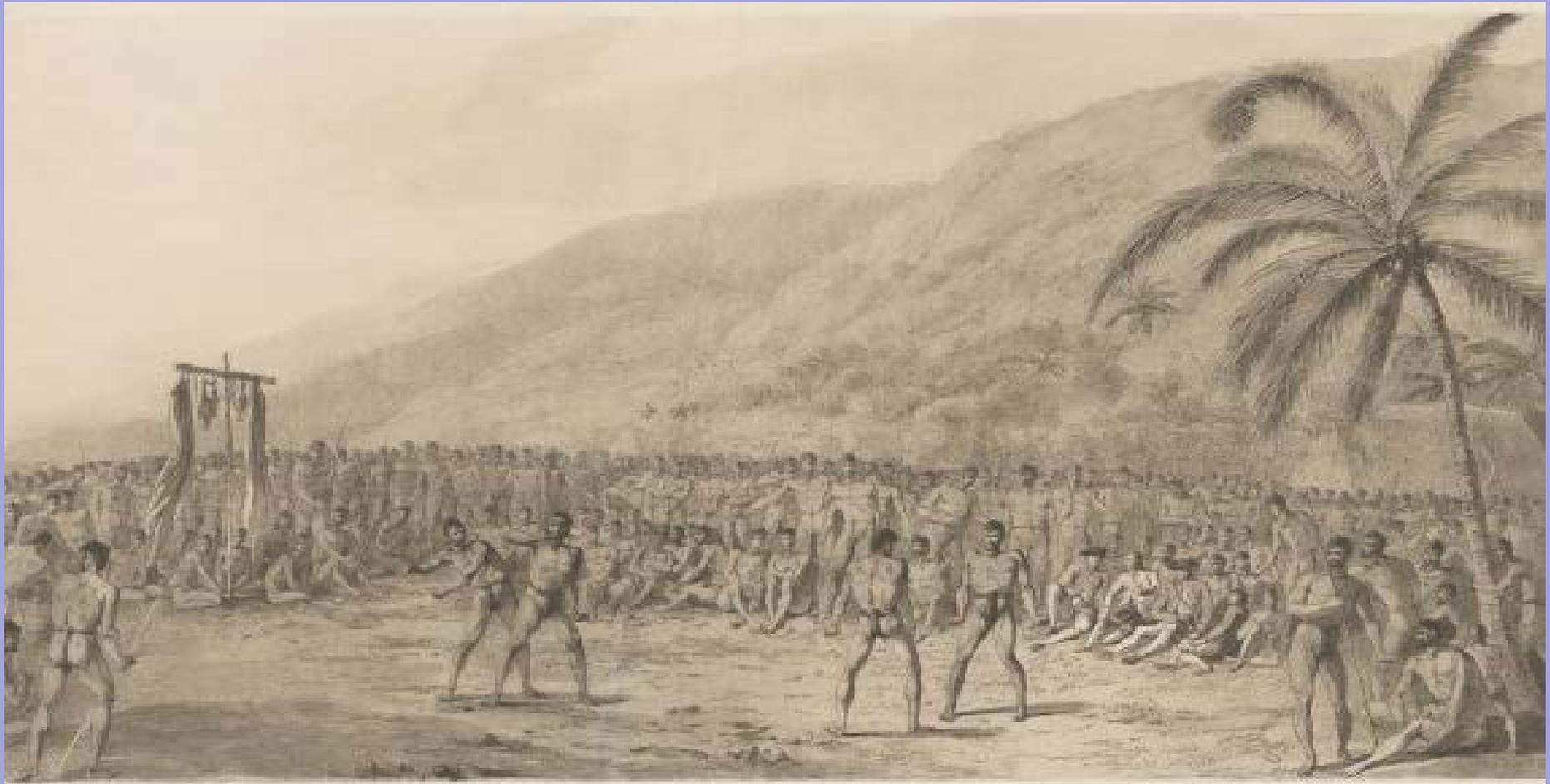
Source: (Hawaii State Department of Health, 2009)

# Traditionally...



- Past: healthy diets, active lifestyles, intact food systems
- Present: poor diets, sedentary lifestyle,
  - Decline in health of Native Hawaiians and Pacific Islanders

# Third Western Contact, January 13, 1779, Kealakekua, Hawai`i Island at Makahiki



**“...Indians are above middle size, strong, well made...of a dark copper Colour...walk gracefully, run nimbly and are capable of great fatigue.... Women have handsome faces ...good Teeth...agreeable tempers...truly good natured, social, friendly, and humane, possessing much liveliness and a constant flow of good Humour.”** First Western Contact, Capt. Cook Waimea, Kaua`I - January 19, 1778



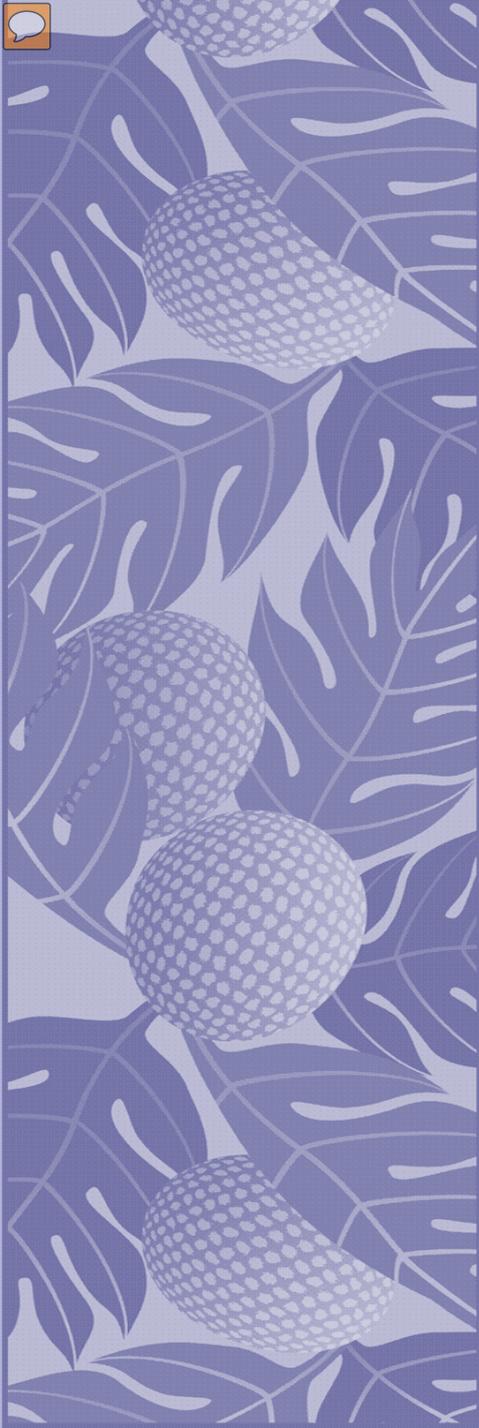
# What are risk factors for Obesity?

# Risk Factors

- Genetics
- Inactivity
- Unhealthy diet and eating habits
- Family lifestyle
- Quitting smoking
- Pregnancy
- Lack of Sleep

# Risk Factors

- Certain medications
- Age
- Social and economic issues
- Medical problems



# Jeopardy

# Risk factors that CANNOT be controlled

- Age
- Family history
- Ethnicity?
- Gender



# Risk factors that CAN be controlled



- High cholesterol
- Smoking
- Lack of physical activity
- Unhealthy diet



# What are other risk factors?

Risk Factor	Effect
<p data-bbox="146 364 454 406"><b>Chronic Stress</b></p>  A close-up photograph of a hand squeezing a pink-frosted donut with colorful sprinkles. The hand is positioned as if about to bite into the donut, symbolizing stress and the desire for comfort food.	<p data-bbox="765 364 1748 406">Releases stress hormones (adrenaline and cortisol)</p> <p data-bbox="765 421 1584 464">“Flight or fight” response → burst of energy</p> <p data-bbox="765 478 1593 521">Causes hunger in response to “energy use”</p> <p data-bbox="765 535 1642 578">Lowers muscle building hormone testosterone</p> <p data-bbox="765 592 1574 635">Lower muscle mass → burn fewer calories</p> <p data-bbox="765 649 1613 692">Cortisol encourages fat storage (visceral fat)</p>
<p data-bbox="146 796 376 839"><b>Alcoholism</b></p>  A row of five identical green glass beer bottles standing on a white surface, representing alcohol consumption.	<p data-bbox="765 796 1391 839">Stops metabolizing fats &amp; sugars</p> <p data-bbox="765 853 1110 896">Stimulates hunger</p> <p data-bbox="765 911 1497 953">Impairs judgment → poor food choices</p> <p data-bbox="765 968 1787 1011">Associated with abdominal obesity in men (beer belly)</p> <p data-bbox="765 1025 1420 1068">Increased risk for Type II Diabetes</p>
<p data-bbox="146 1110 376 1153"><b>Depression</b></p>  A silhouette of a person sitting on the ground next to a large black bomb. The bomb has the word "DEPRESSION" written on it in white capital letters. The bomb is attached to a chain, symbolizing the heavy burden of depression.	<p data-bbox="765 1110 1043 1153">Lack of energy</p> <p data-bbox="765 1168 1110 1210">Lack of motivation</p> <p data-bbox="765 1225 1178 1268">Appetite disturbances</p> <p data-bbox="765 1282 1651 1325">Eat sugars &amp; fats → “good feeling” → eat more</p>

# Review

## **In this module, we covered. . .**

- An overview of weight
- What healthy weight is
- Difference between overweight and obese
- Who is diagnosed with obesity
- The risk factors of obesity

# Questions or Comments

