

Diversity and Body Image: Mindset Shift



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Agenda

- Identify the different forms of body image issues
 - Eating disorders
 - Disordered eating
 - Muscle Dysmorphia
 - Obesity

Definitions

● Body Image

- How we see ourselves when we look in the mirror or picture ourselves in our minds

● Obesity

- Abnormally high proportion of body fat based on BMI or body fat percentages

● Overweight

- Excess body weight compared to set standards

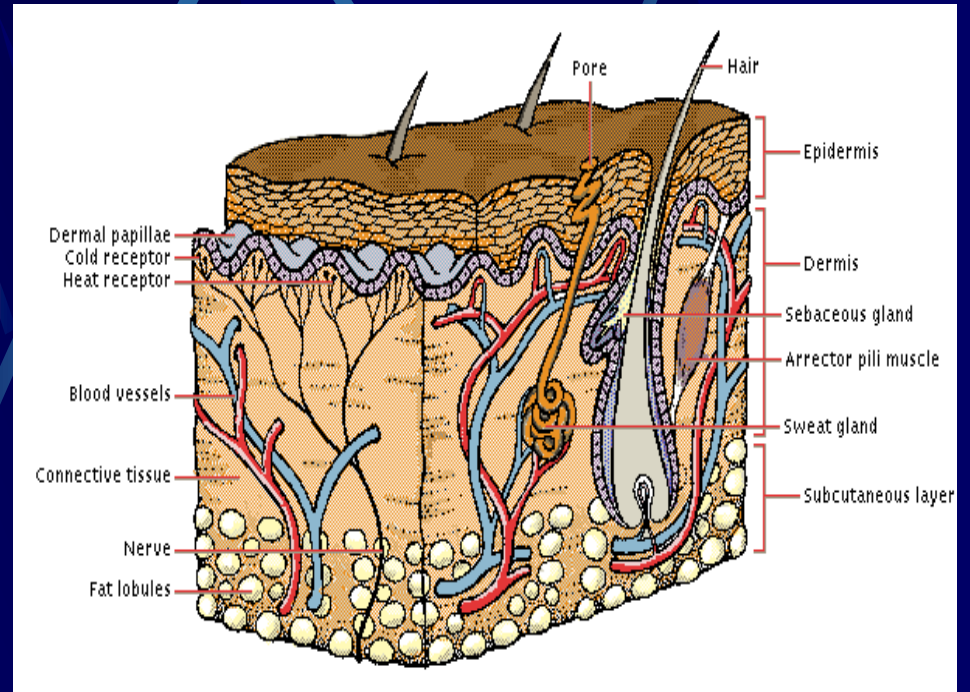
● Anorexia

- Self-starvation

Definitions

- **Bulimia**
 - Cycles of binge eating and purging
- **Binge eating disorder**
 - Eating large amounts of food in short period of time
- **Disordered eating**
 - Troublesome eating behaviors such as restrictive dieting, bingeing, or purging
- **Muscle Dysmorphia**
 - Preoccupation with size; warped perception of self

Medical Research



Scientific Medicine: 1900-2012

- **1940: Wells published “Adipose Tissue: A neglected subject”**
- **1946: Hydrostatic weight**
- **1946: Fat cells metabolize**
- **1947: Risk of peripheral Fat**
- **1950: Obese mouse described**
- **1953: Bypass surgery for obesity**

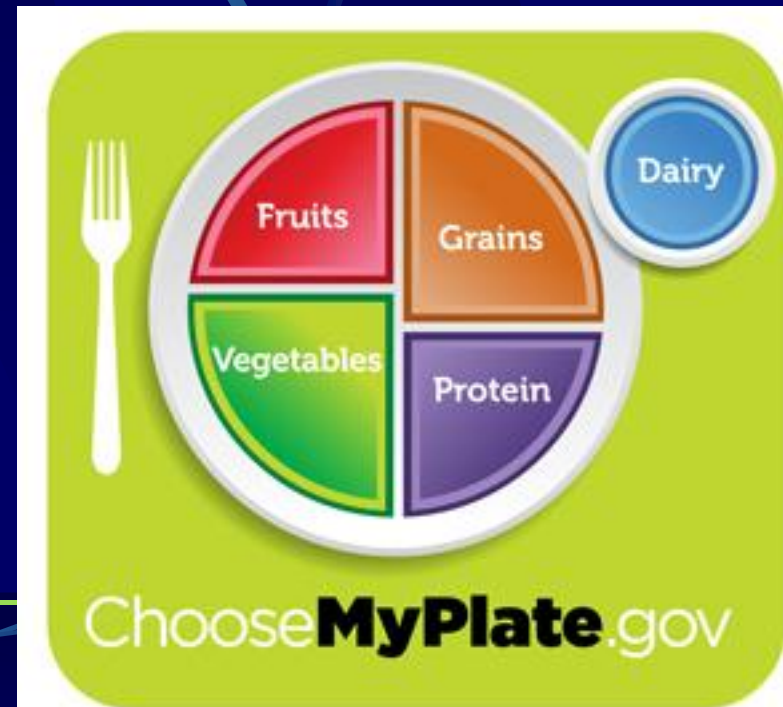
Scientific Medicine: 1900-2012

- **1963: Socio-economic status & obesity**
- **1975: Fat cells cultured**
- **1978: Adrenalectomy prevents obesity**
- **1980-1989: Obesity levels grew dramatically; Eating disorders were labelled**
- **1982: CT of Visceral Fat**

Scientific Medicine: 1900-2012

- **1990's: Connection among specific diseases and obesity and eating disorders; treatment centers began to develop; DSM criteria was developed for eating disorders**
- **1992: Food guide pyramid introduced**
- **2000s: Metabolic Syndrome; Food guide pyramid revised four times; USDA Dietary Guidelines reports; billions \$\$\$ obesity research; hospital surgeries, fitness programs; new disorder identified: Muscle Dysmorphia**
- **2004: One third of Americans are obese; 25 percent are diabetic or pre-diabetic; 1 in 3 Type II diabetes life risk**
- **2011: Two thirds of Americans are overweight or obese; My plate replaces pyramid**

Nutrition Changes



Summary of Medical History

- 1900 – Infectious Diseases
- 1960 – Chronic Diseases
- 1990 – Inactivity/Sedentary
- 2000 - Metabolic Syndrome; Surgeries

Obesity Facts

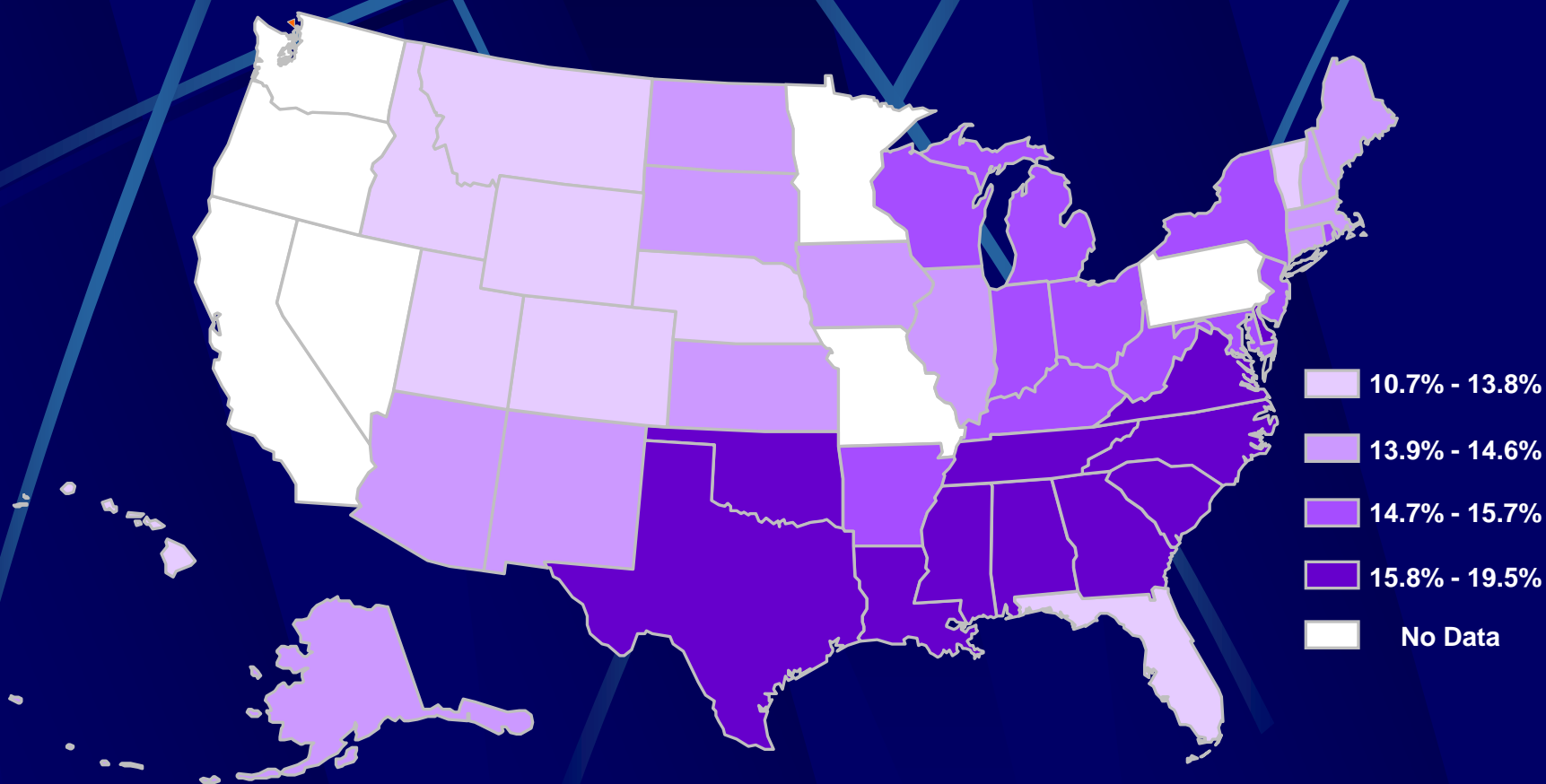
- No state has a prevalence of obesity less than 20%.
- Thirty-six states have a prevalence of 25% or more;
- 12 of these states (Alabama, Arkansas, Kentucky, Louisiana, Michigan, Mississippi, Missouri, Oklahoma, South Carolina, Tennessee, Texas, and West Virginia) had a prevalence of 30% or more.

Face the Facts

- 35.7% of all U.S. adults are obese
- 16.9% of all U.S. children are obese
 - 12.3% >97th percentile
- 66.8% of Texas residents are either overweight or obese (TDSHS, 2011)

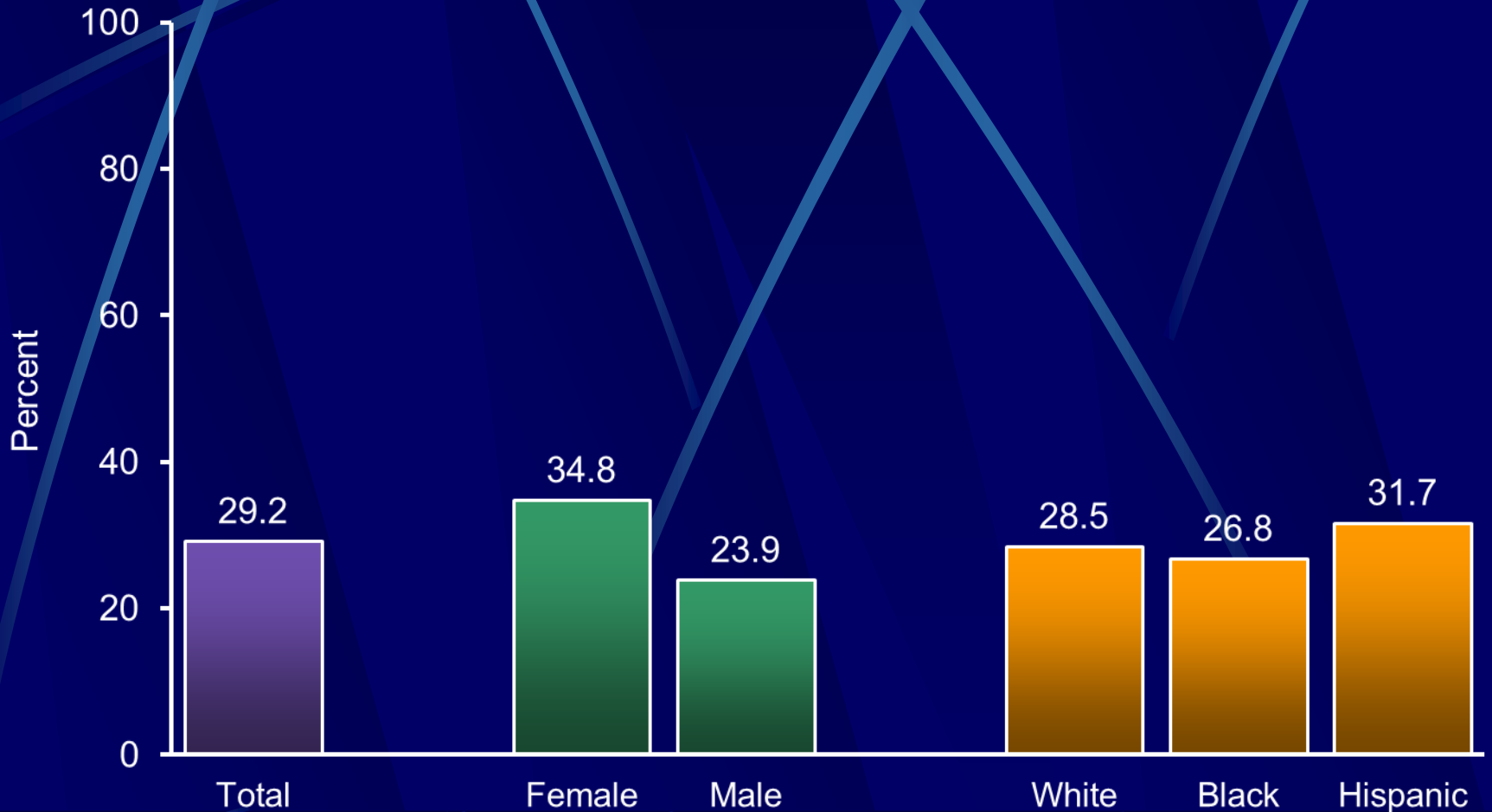


Percentage of High School Students Who Were Overweight,* 2011



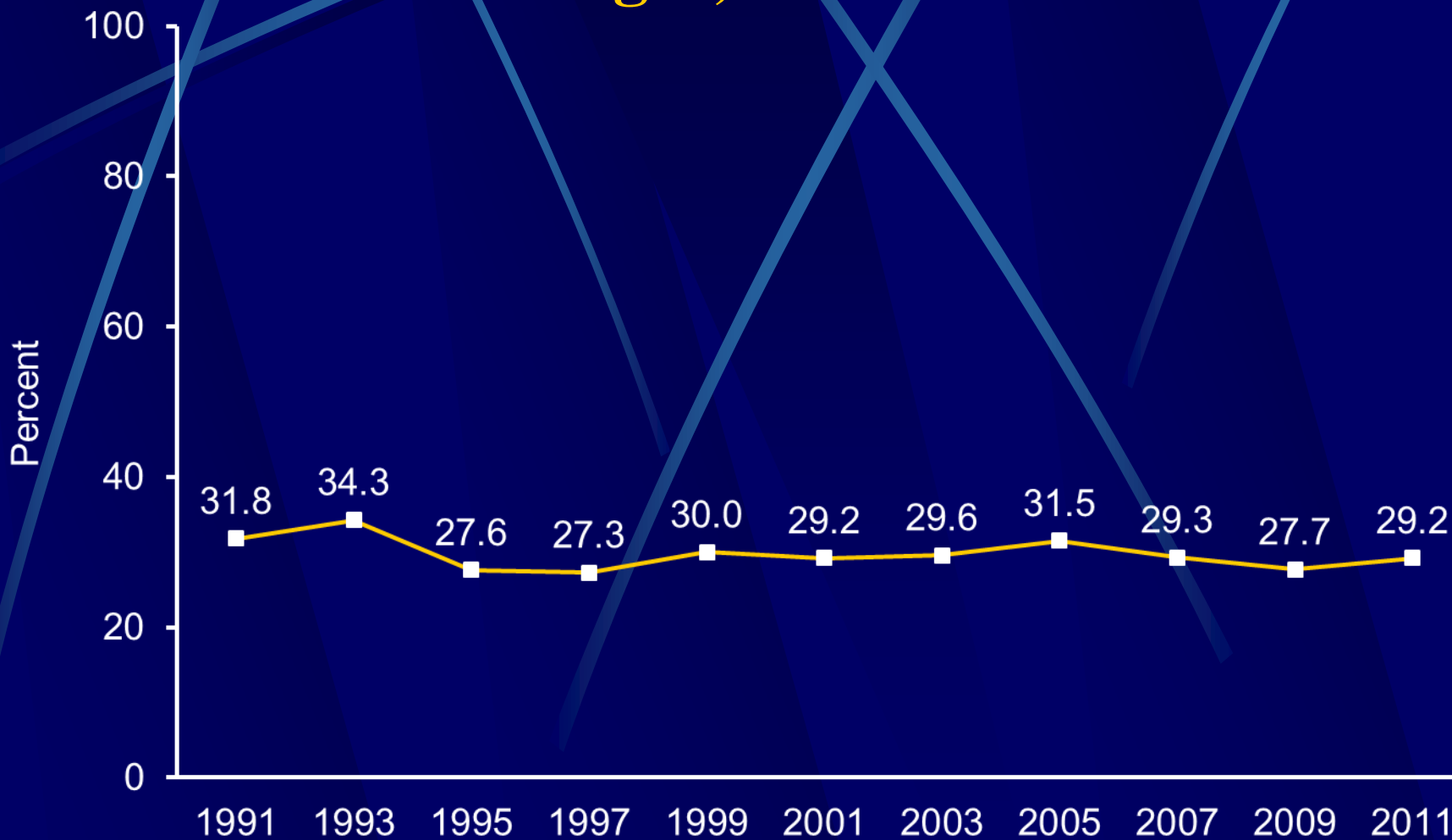
* Students who were = 85th percentile but < 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts.

Percentage of High School Students Who Described Themselves as Slightly or Very Overweight, by Sex* and Race/Ethnicity,† 2011



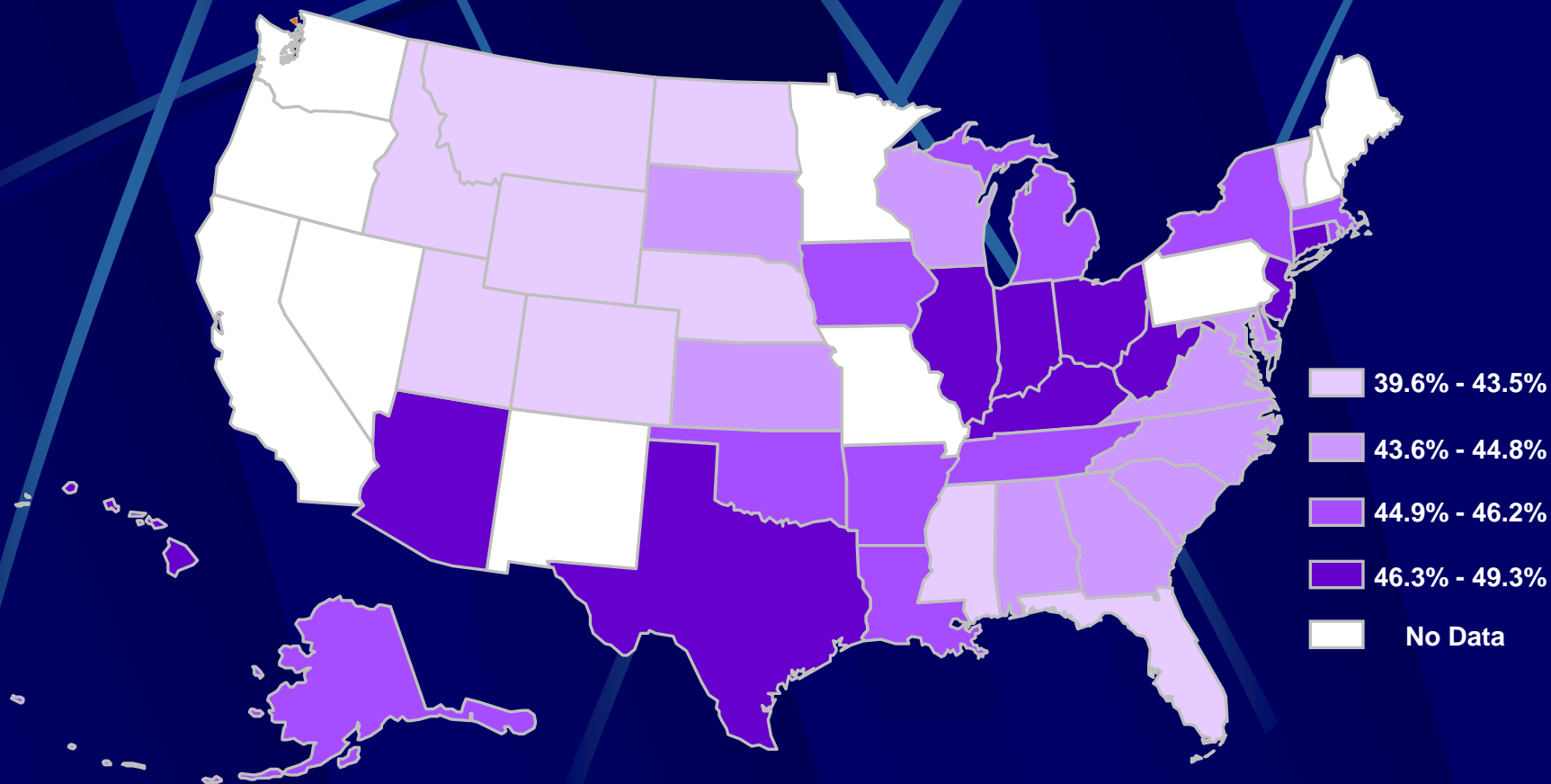
* F > M
† H > W, B

Percentage of High School Students Who Described Themselves as Slightly or Very Overweight, 1991 – 2011*

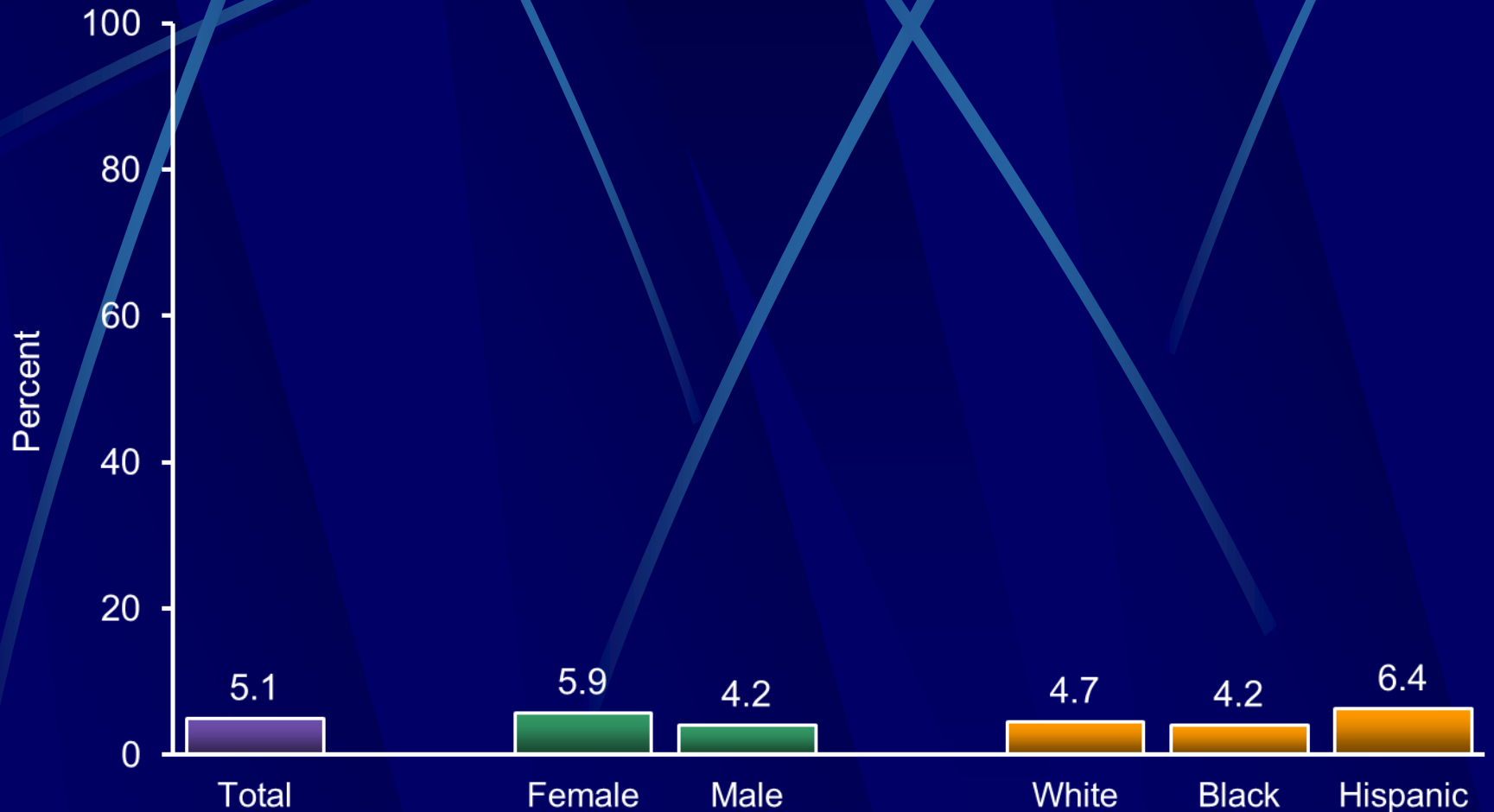


* Decreased 1991–1997, no change 1997–2011, $p < 0.05$.

Percentage of High School Students Who Were Trying to Lose Weight, 2011



% HS Students Who Took Diet Pills, Powders, or Liquids to Lose Weight or to Keep from Gaining Weight,* by Sex† and Race/Ethnicity,§ 2011

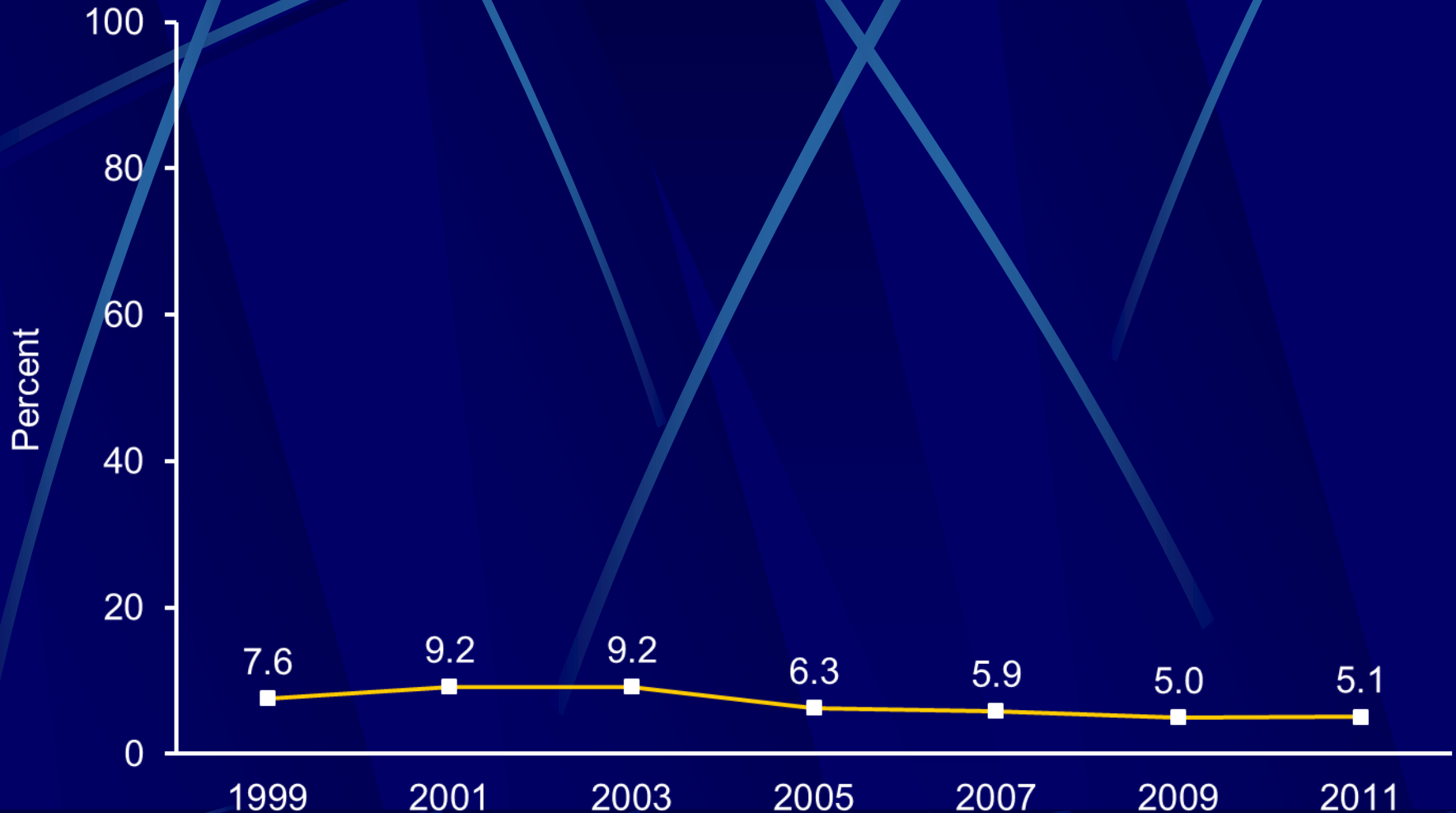


* Without a doctor's advice during the 30 days before the survey.

† F > M

§ H > W > B

Percentage of High School Students Who Took Diet Pills, Powders, or Liquids to Lose Weight or to Keep from Gaining Weight,* 1999 – 2011†



* Without a doctor's advice during the 30 days before the survey.

† Increased 1999–2001, decreased 2001–2011, $p < 0.05$.

National Youth Risk Behavior Surveys, 1999–2011

Healthcare Costs 1950 to 2018

- 1950s: Healthcare costs <\$20 billion
- 1960s: Healthcare costs = \$27.1 billion
- 1970s: Healthcare costs = \$74.4 billion
- 1980s: Healthcare costs = \$250.1 billion Federal budget deficit >\$100 billion for 1sttime
- 1990s: Healthcare costs = \$675 billion
- 1994: Healthcare costs = \$1,000 billion or 14% of gross domestic product (GDP)
- 2018: \$344 billion in medical-related expenses, or 21% of our nation's health-care spending

The Body Image Continuum

Ectomorphy

Mesomorphy

Endomorphy

Anorexia

Nervosa/

Bulimia



Obesity/Binge

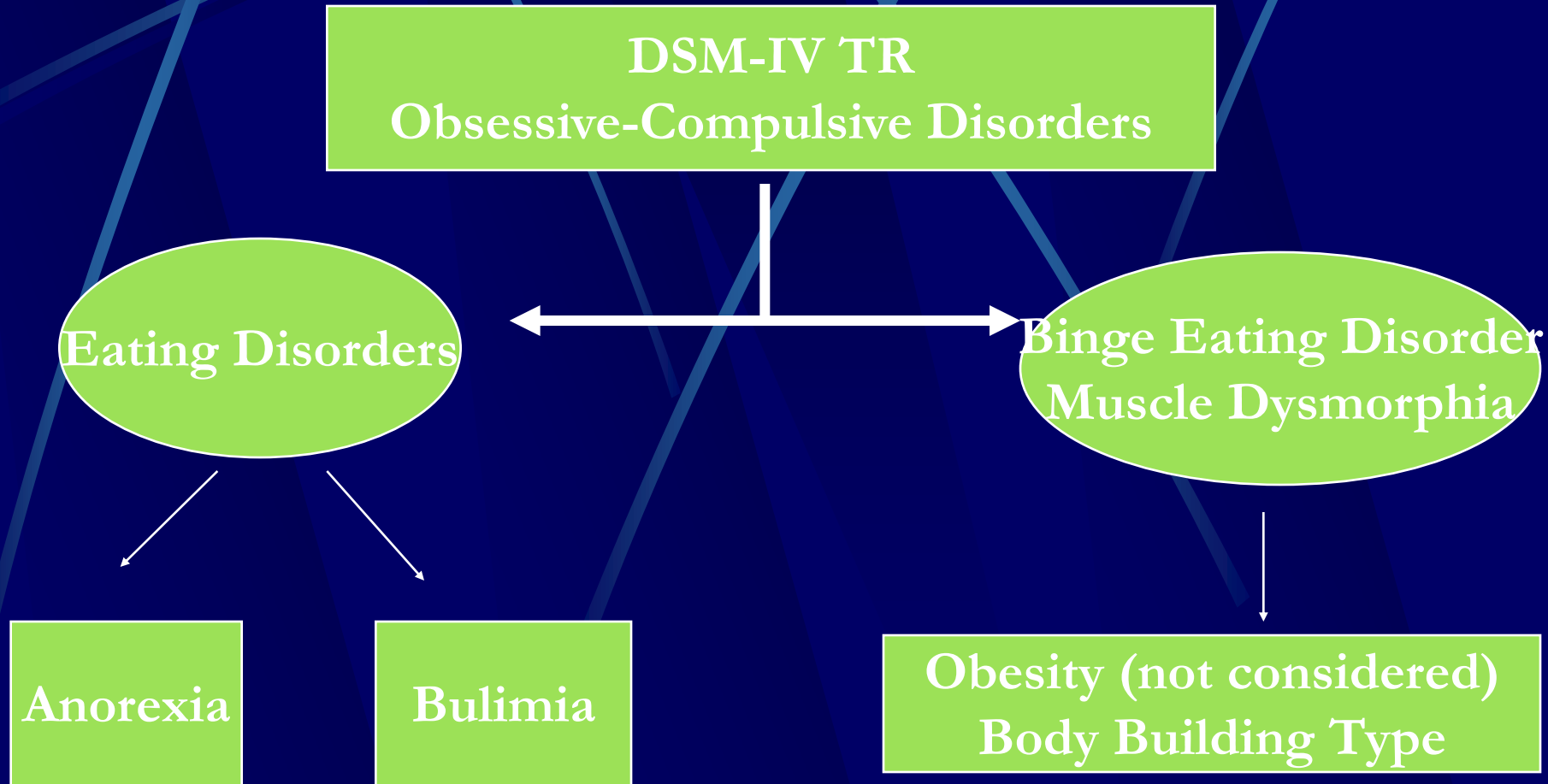
Eating

Disorder

Muscle

Dysmorphia

OCD/Addiction Model



Five Themes of Body Image Issues

- **Physiological approach to a controlled system of food intake**
- **Cellular basis**
- **Molecular biological approaches**
- **Behavioral or Psychological aspects**
- **Socio-cultural aspects**

Eating Disorders, Muscle Dysmorphia & Obesity

- They share a range of weight related problems
- Body dissatisfaction & unhealthy dieting practices
- Binge eating
- Environment
- Depression, anxiety, mood disorders
- Self-esteem issues

Health Risks: Eating Disorders

- **Stunted growth**
- **Delayed menstruation**
- **Damage to vital organs**
- **Nutritional deficiencies**
- **Cardiac arrest**
- **Emotional problems**

Health Risks: Obesity

- High blood pressure
- Stroke
- Cardiovascular Disease
- Gallbladder Disease
- Diabetes
- Respiratory problems
- Arthritis
- Emotional problems

Health Risks: Muscle Dysmorphia

- **Damaged muscles, joints, & tendons**
- **Self-hatred**
- **Depression & suicide**
- **Poor relationships**
- **Negatively affected social, work, or school life**
- **Inability to relax without worry**
- **Negative effects from steroid use**

Different characteristics for different races

- ◎ **Restraint**
- ◎ **Bingeing**
- ◎ **Purging**
- ◎ **Laxatives**
- ◎ **Perfectionism**
- ◎ **Acculturated stress**

(Franko & Striegel-Moore, 2002; Rhea, 1999; Rhea et al., 2013)

Risk or protective?

● Risk:

- BID (when impervious)
- Traditional values compromised
- Cultural norms discounted
- Overweight?
- Inability to express negative emotion
- Low self-esteem
- Acculturation (Fiji)

● Protective:

- High self-esteem
- Acculturation
- Less emphasis on food & weight concerns

Questions?