

Intuitive Eating

A novel health promotion strategy for obese women

Janell Mensinger, Ph.D.^{1,2}

Heather Close, B.S.²

James Ku, M.D.²

¹Drexel University

² The Reading Hospital and Medical Center





**NO RELATIONSHIPS TO
DISCLOSE**



INTUITIVE EATING??

WHAT ABOUT...

OBESITY?

We have ALL seen
the problem....

...probably MANY times!

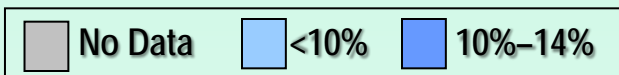
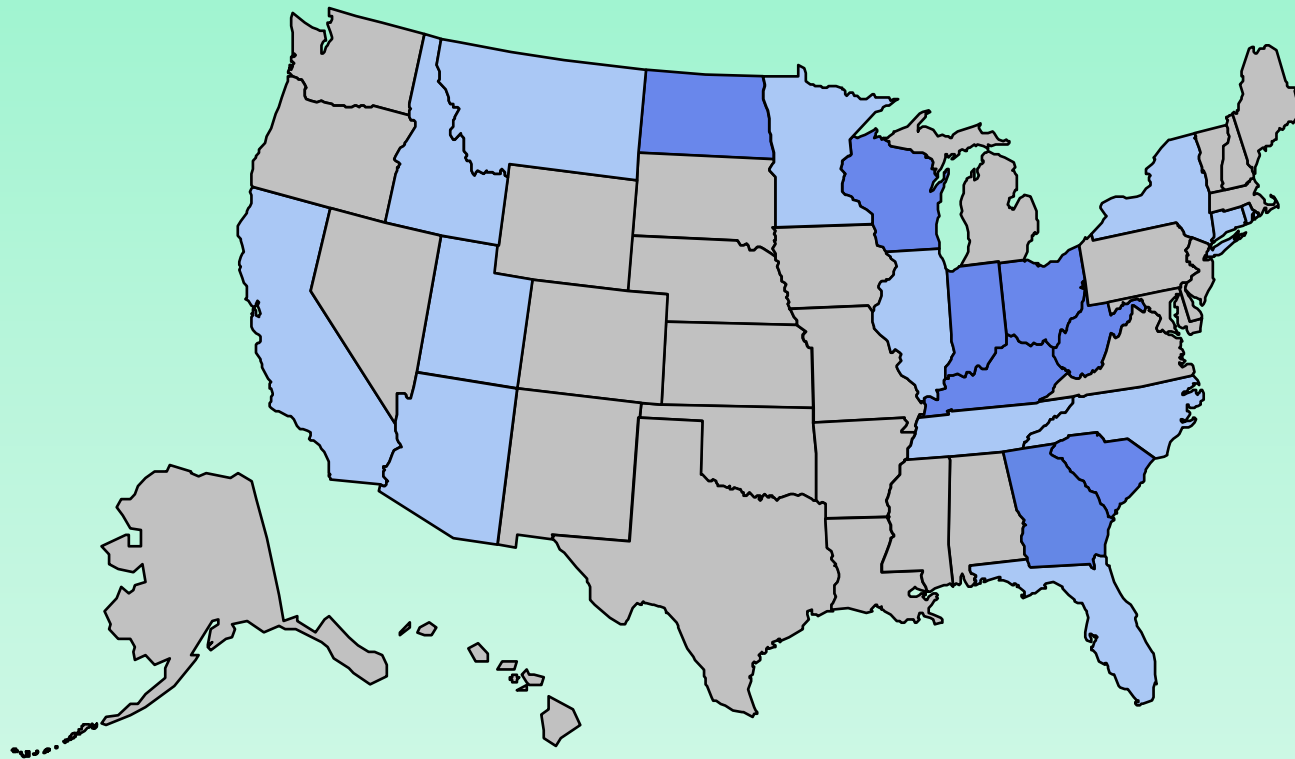


Obesity Trends* Among U.S. Adults

BRFSS, 1985



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

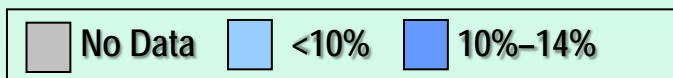
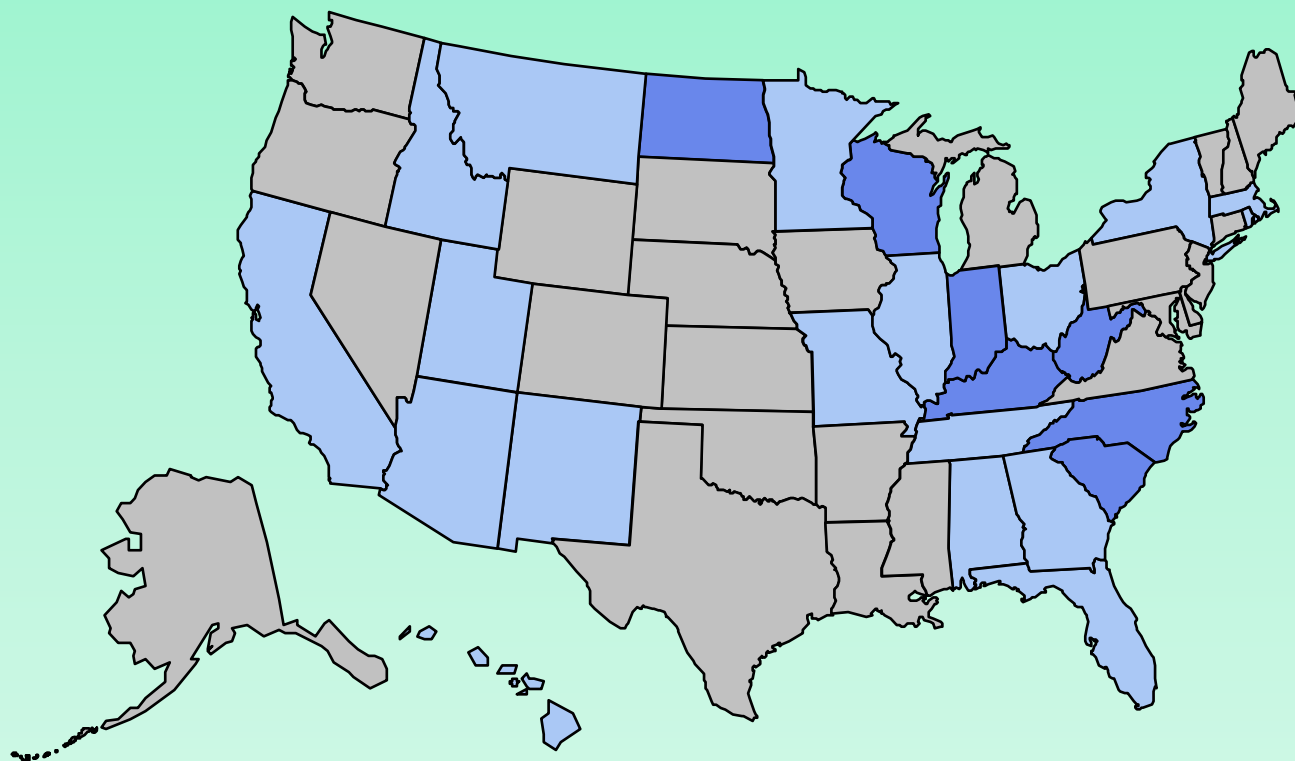


Obesity Trends* Among U.S. Adults

BRFSS, 1986



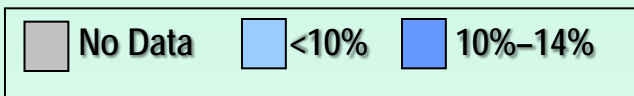
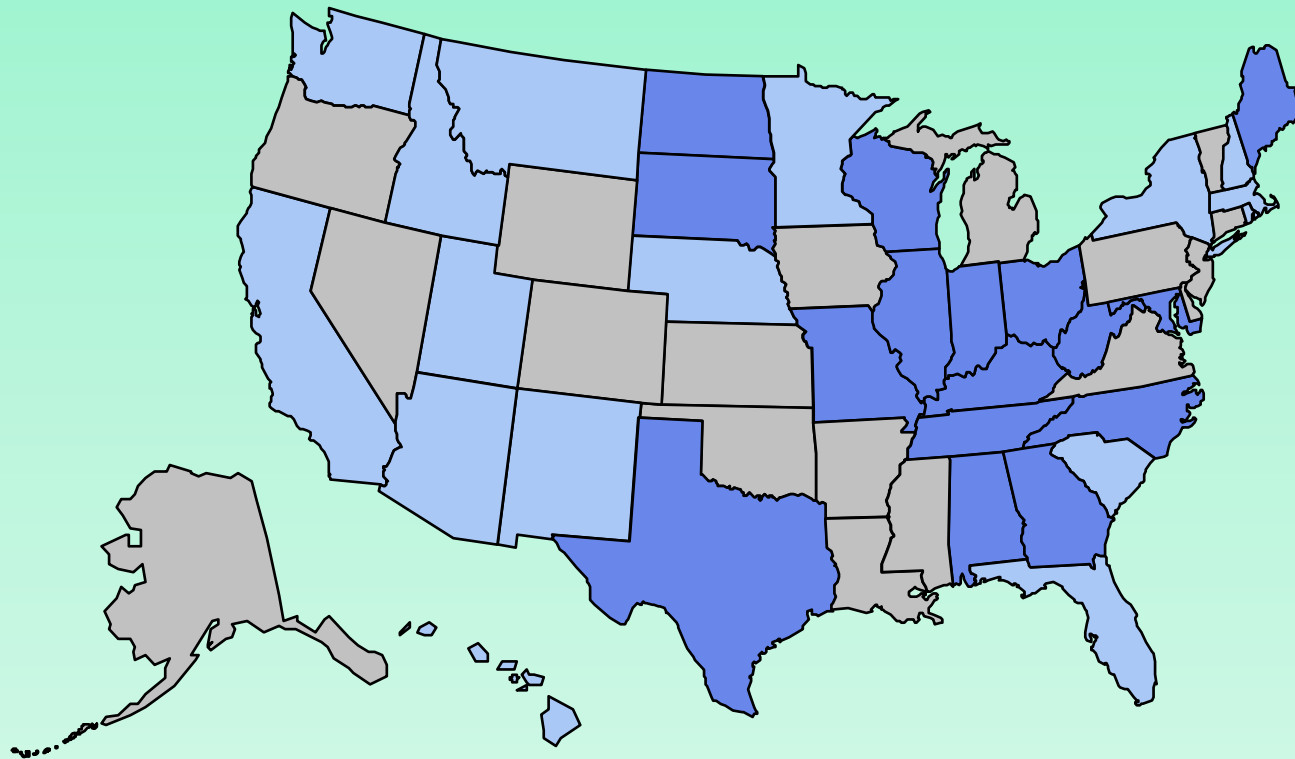
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



Obesity Trends* Among U.S. Adults

BRFSS, 1987

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

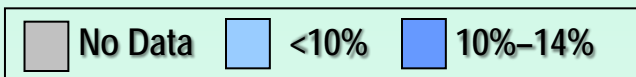
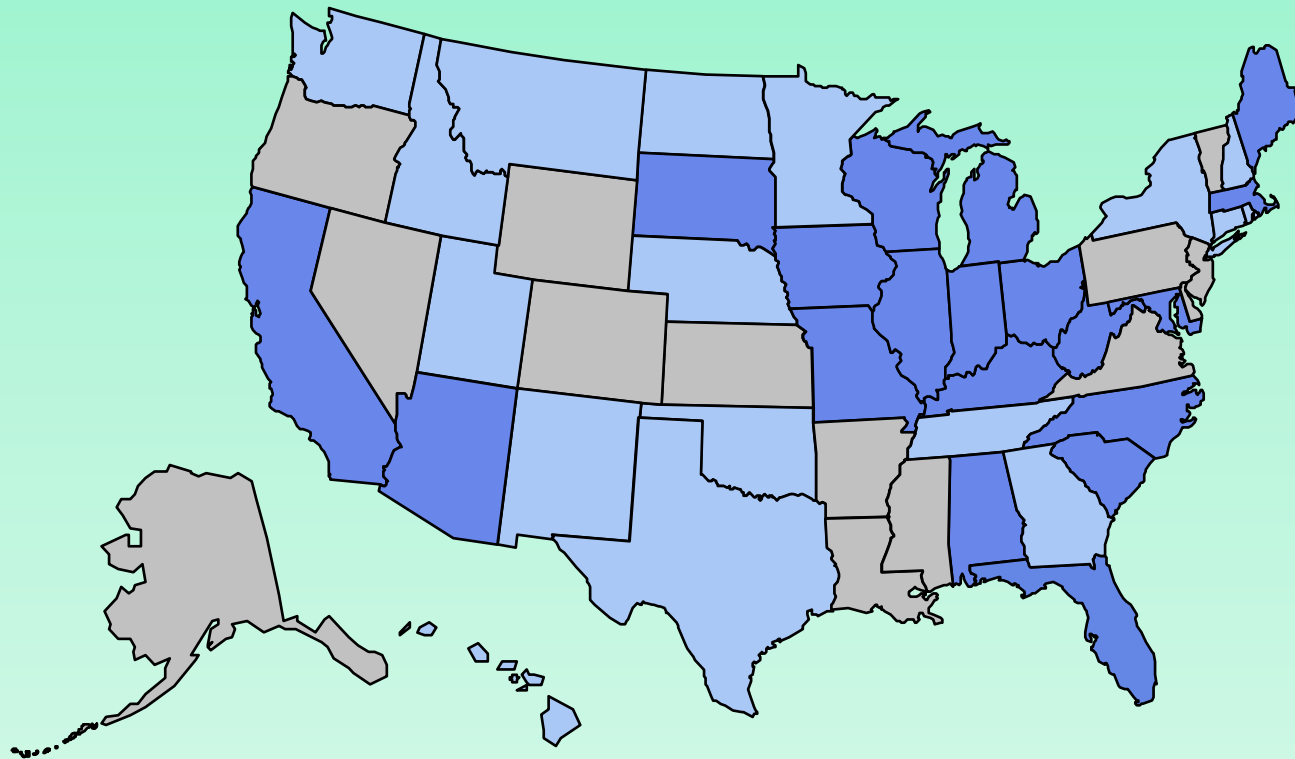


Obesity Trends* Among U.S. Adults

BRFSS, 1988



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

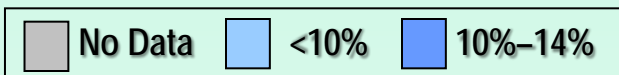
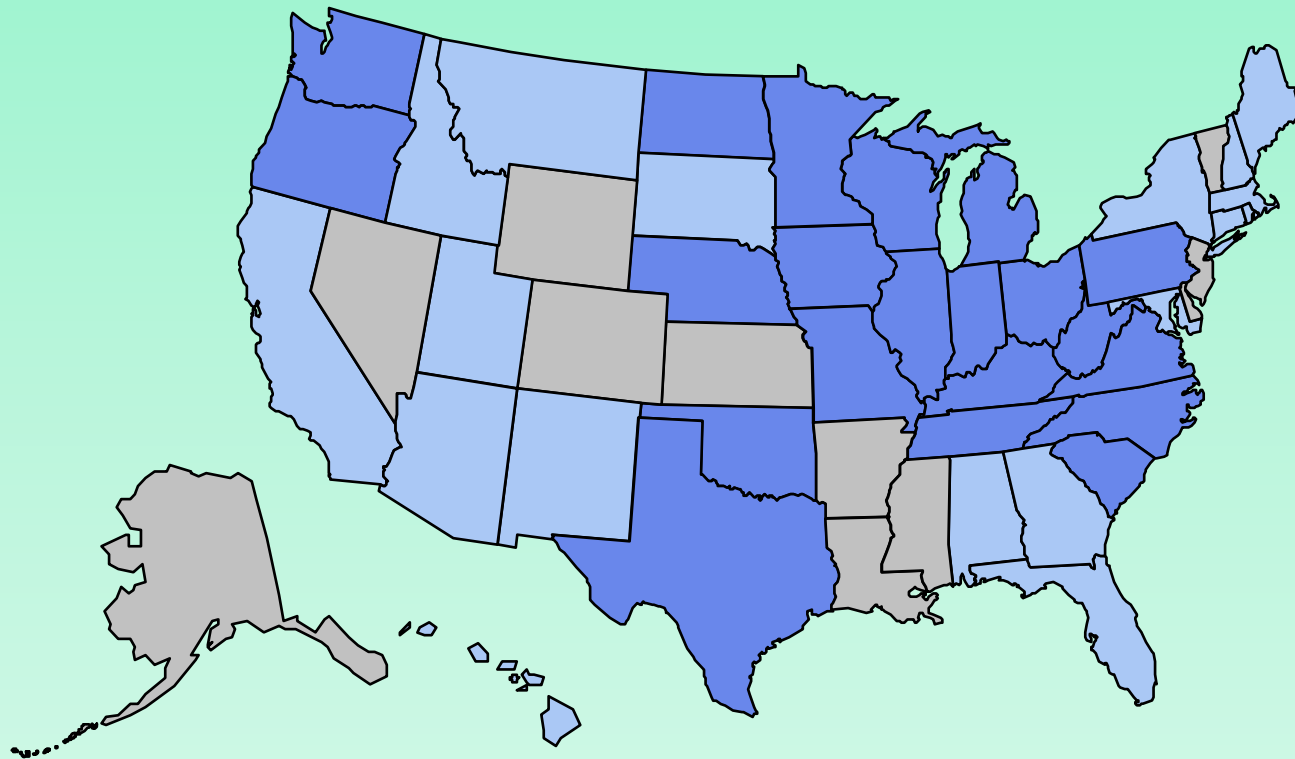


Obesity Trends* Among U.S. Adults

BRFSS, 1989



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

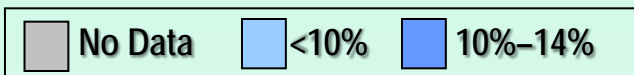
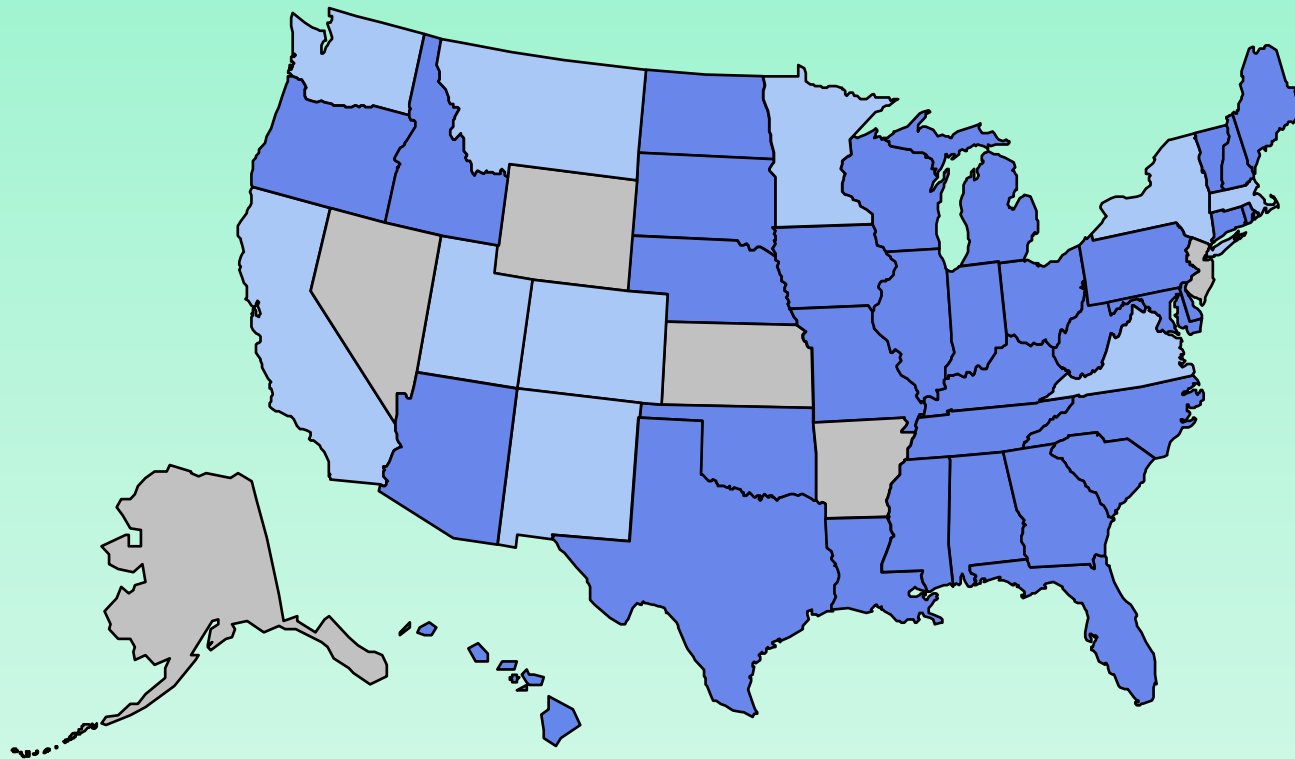


Obesity Trends* Among U.S. Adults

BRFSS, 1990



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

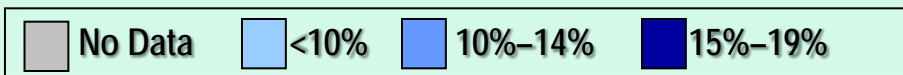
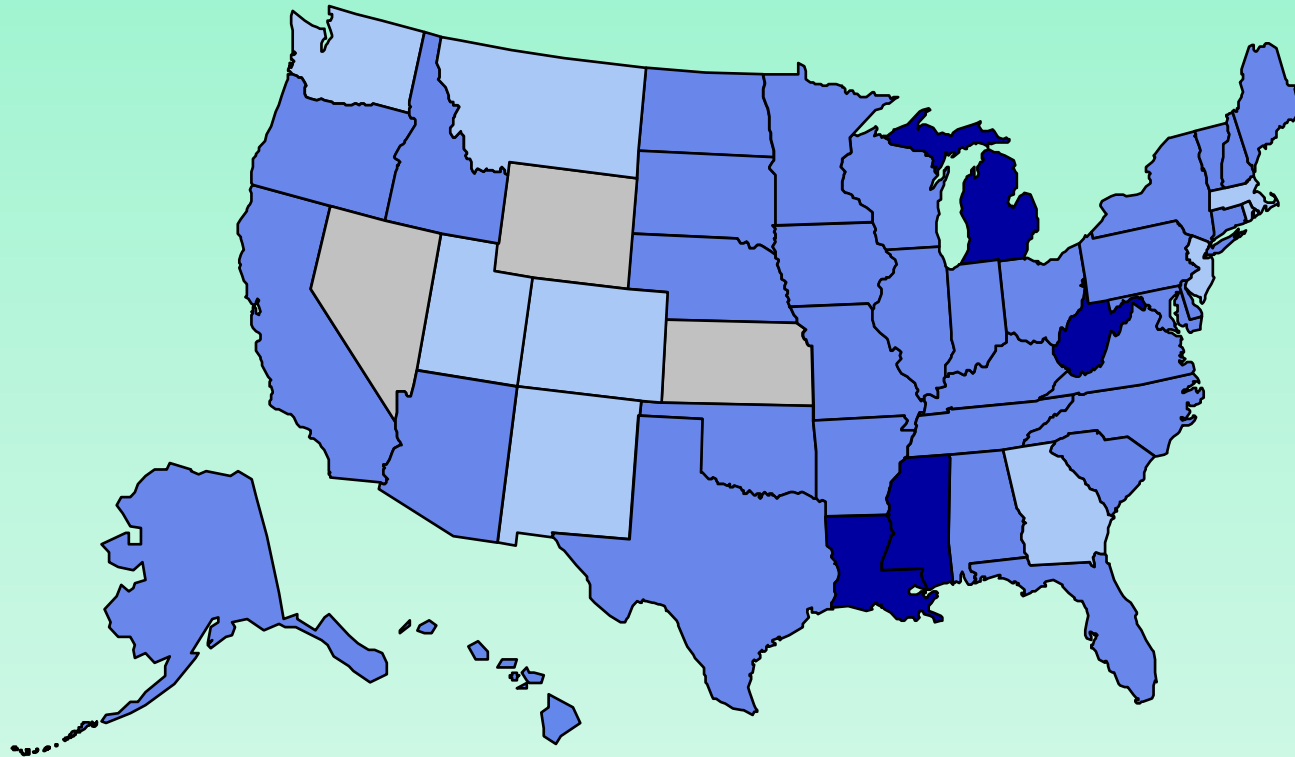


Obesity Trends* Among U.S. Adults

BRFSS, 1991



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

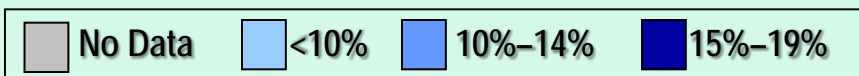
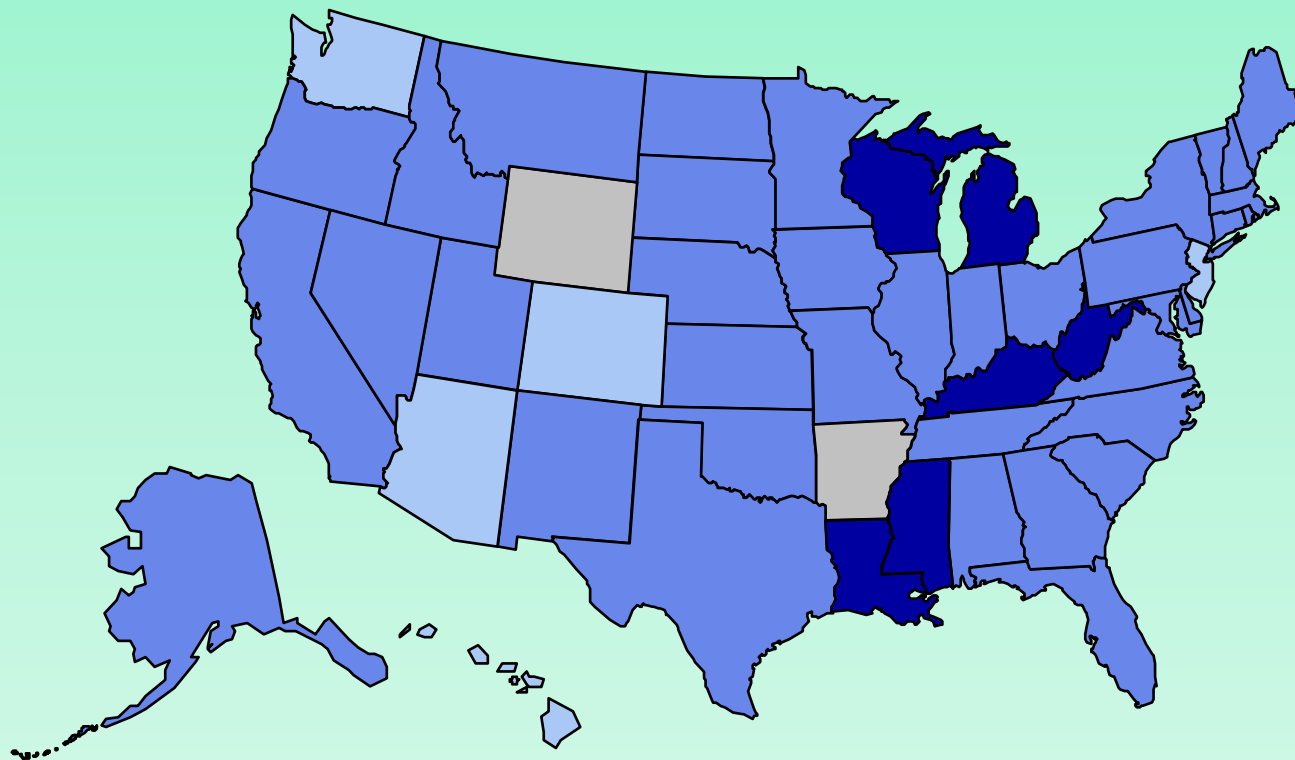


Obesity Trends* Among U.S. Adults

BRFSS, 1992



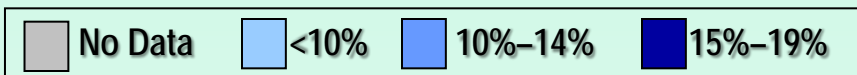
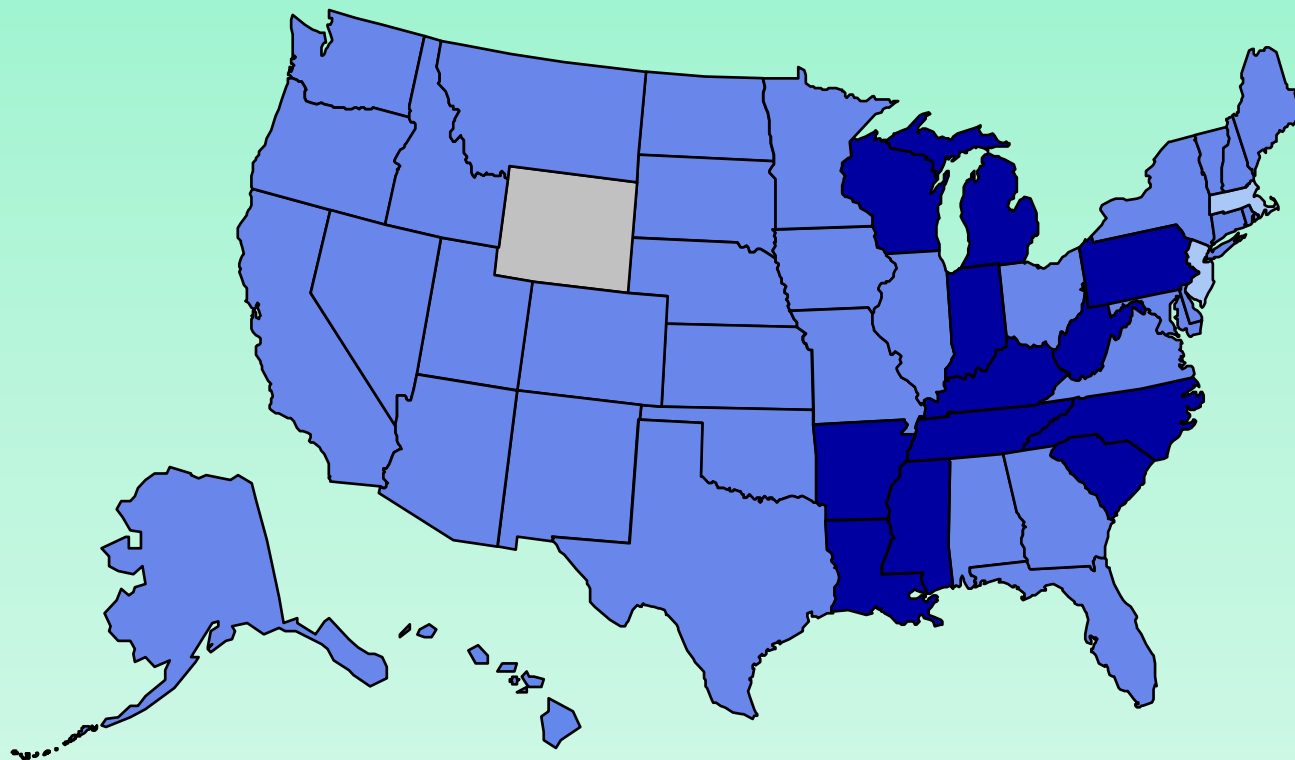
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



Obesity Trends* Among U.S. Adults

BRFSS, 1993

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

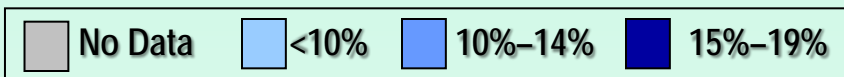
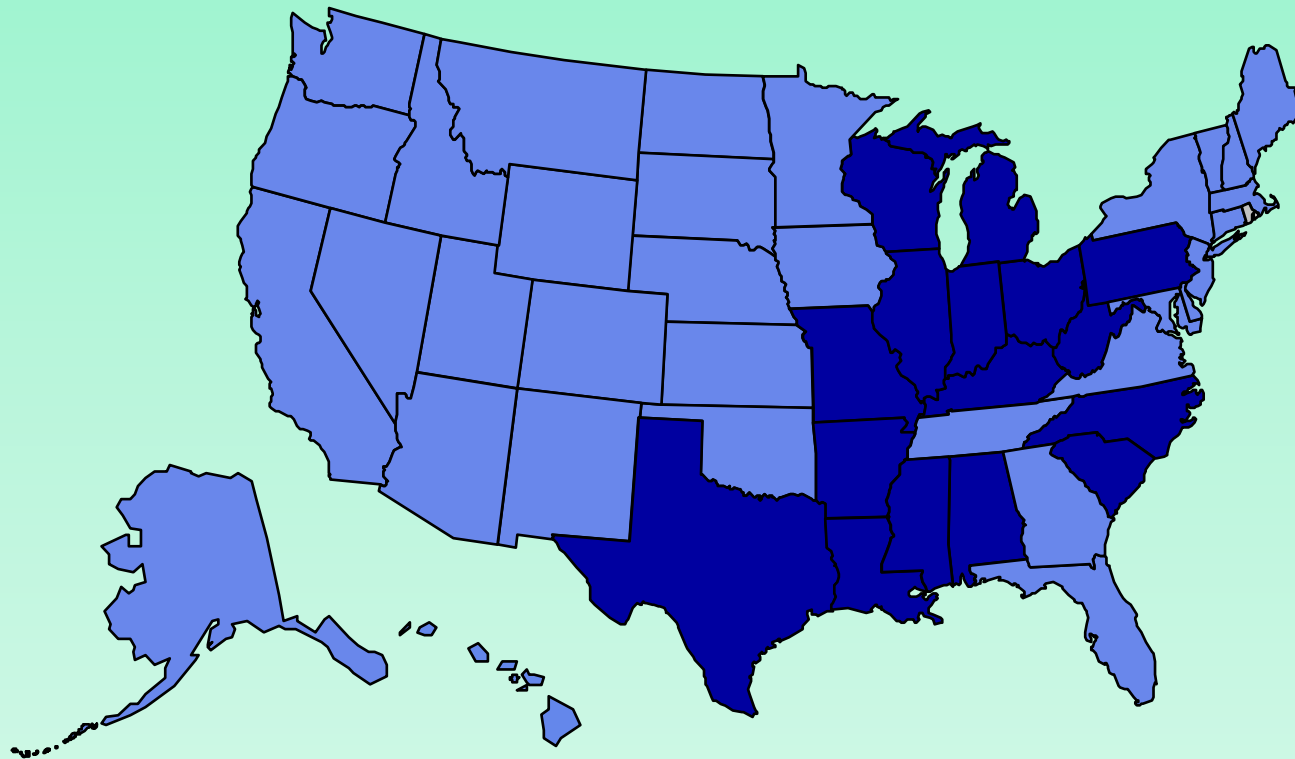


Obesity Trends* Among U.S. Adults

BRFSS, 1994



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

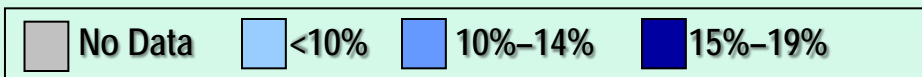
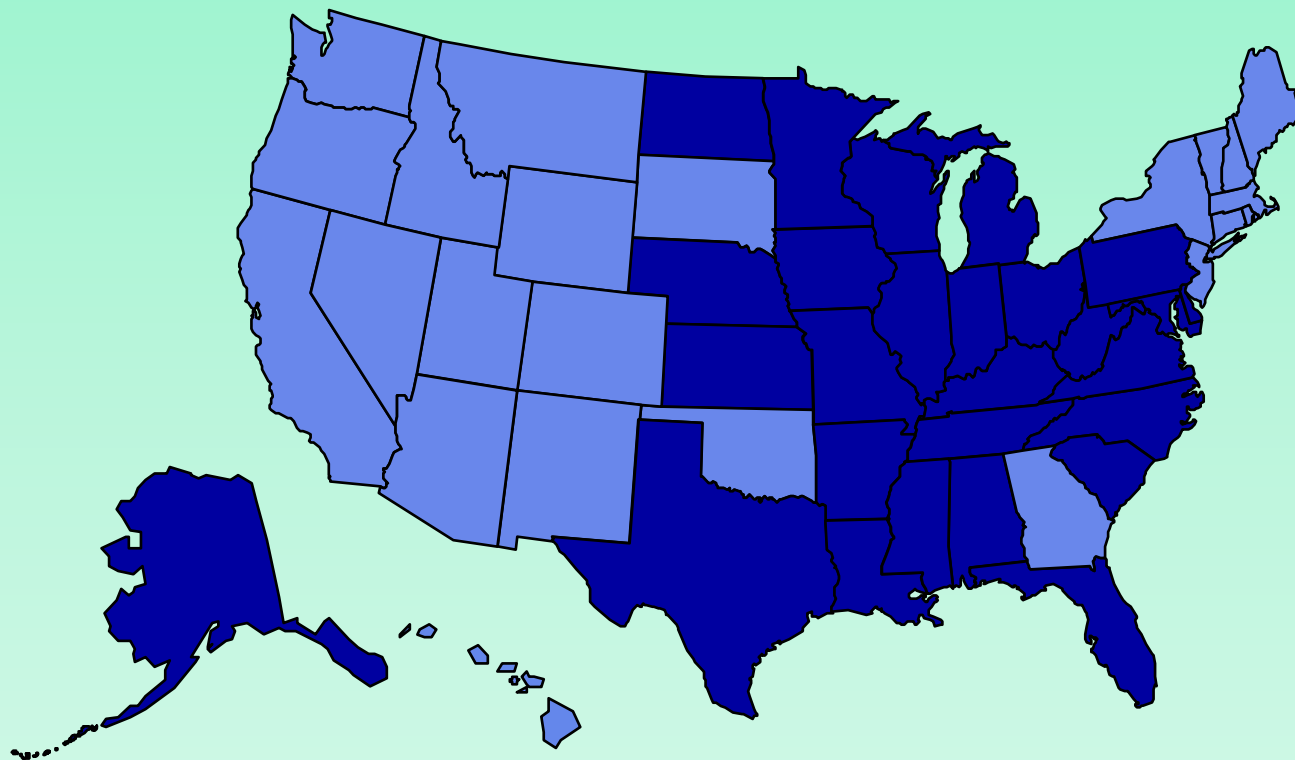


Obesity Trends* Among U.S. Adults

BRFSS, 1995



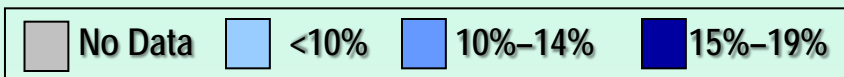
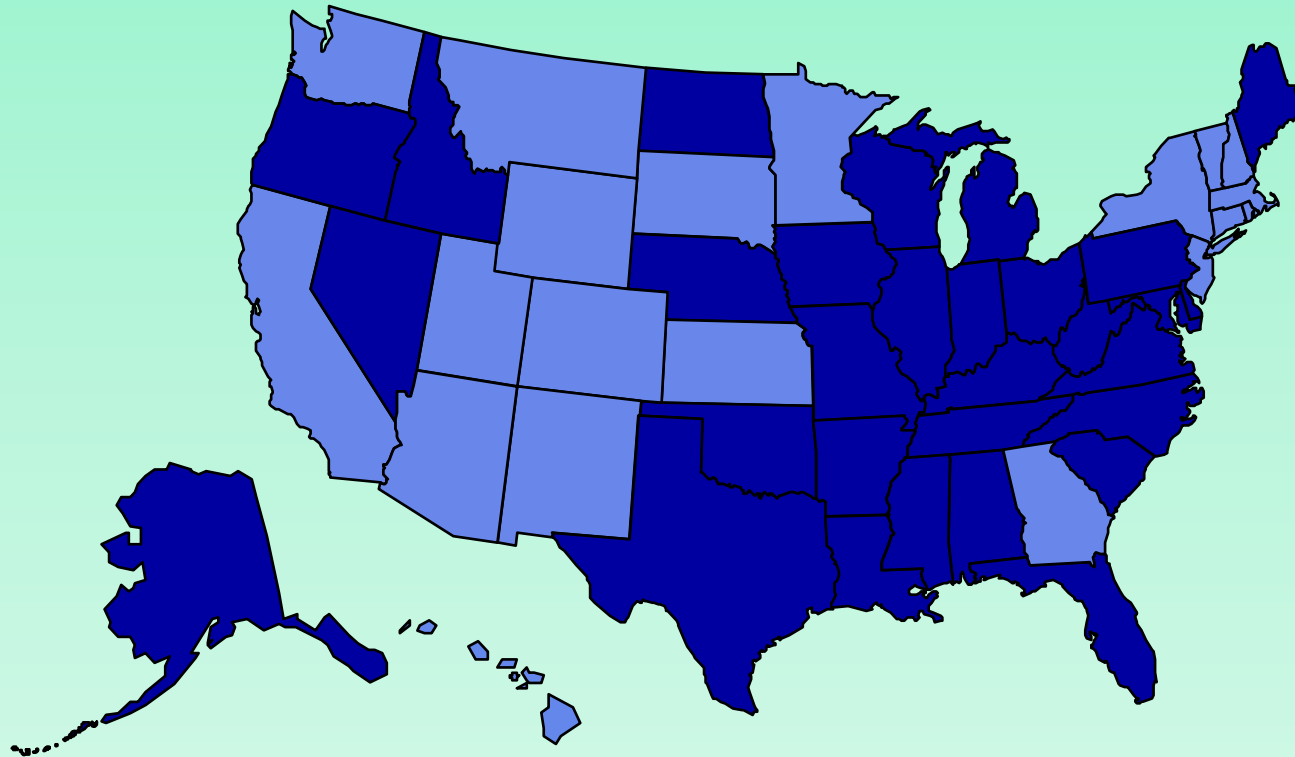
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



Obesity Trends* Among U.S. Adults

BRFSS, 1996

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

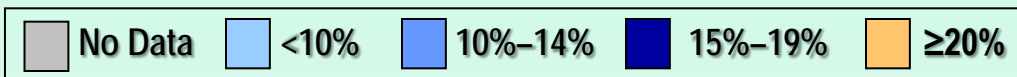
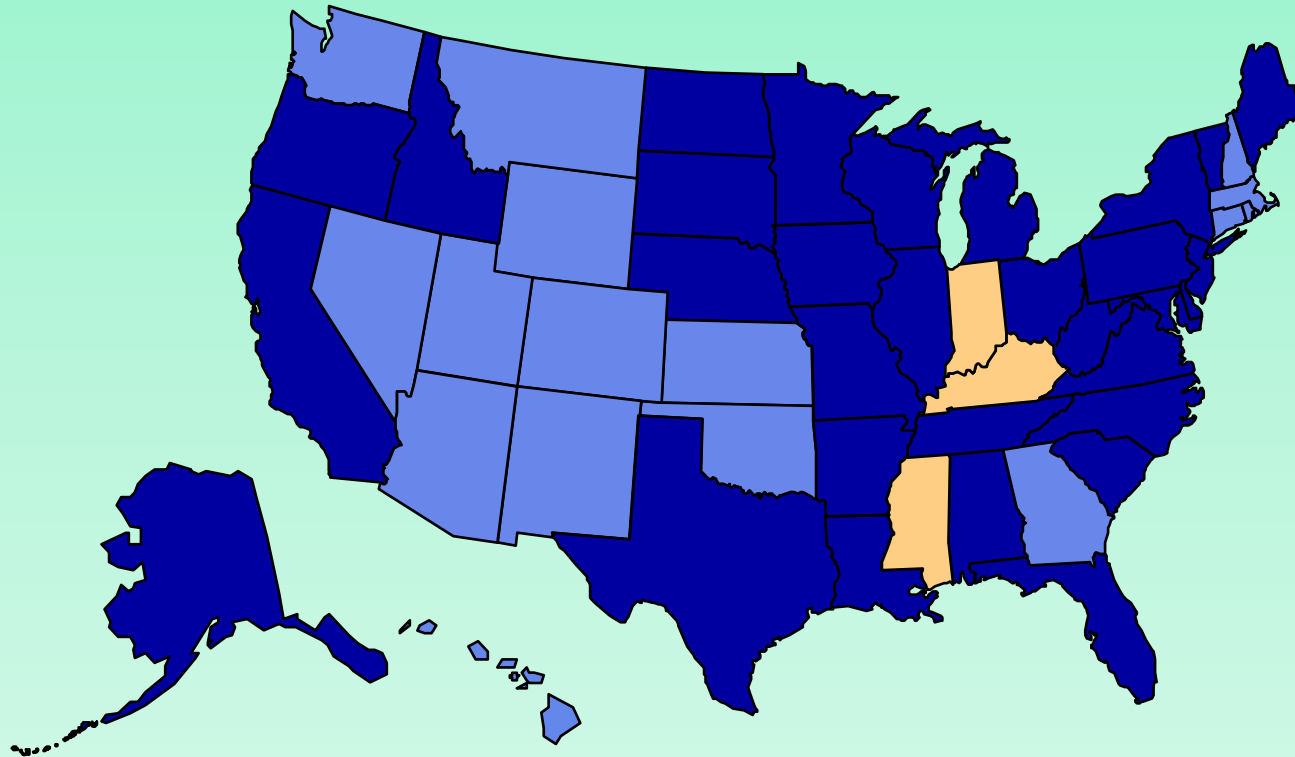


Obesity Trends* Among U.S. Adults

BRFSS, 1997



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

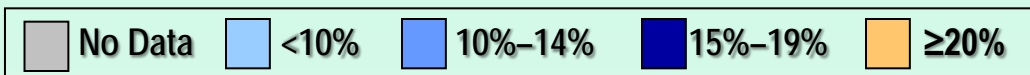
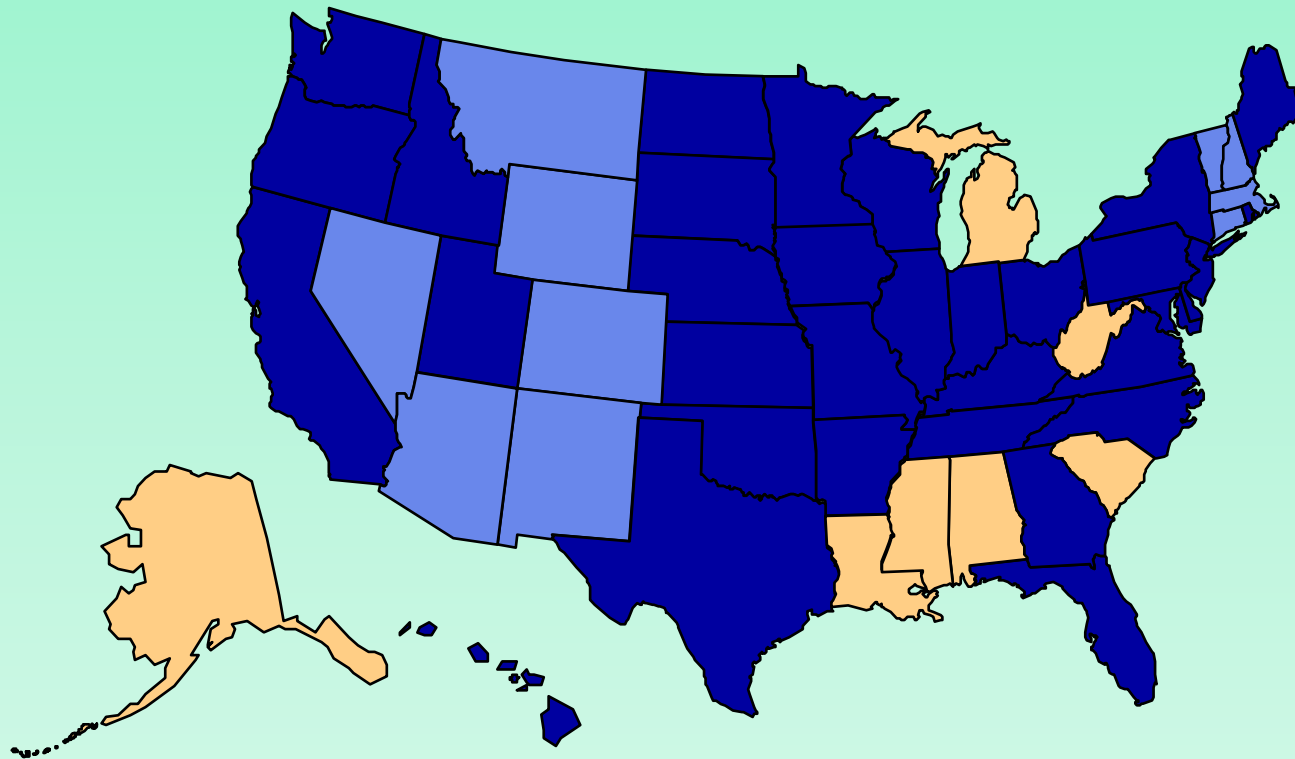


Obesity Trends* Among U.S. Adults

BRFSS, 1998



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

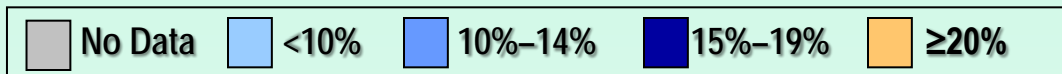
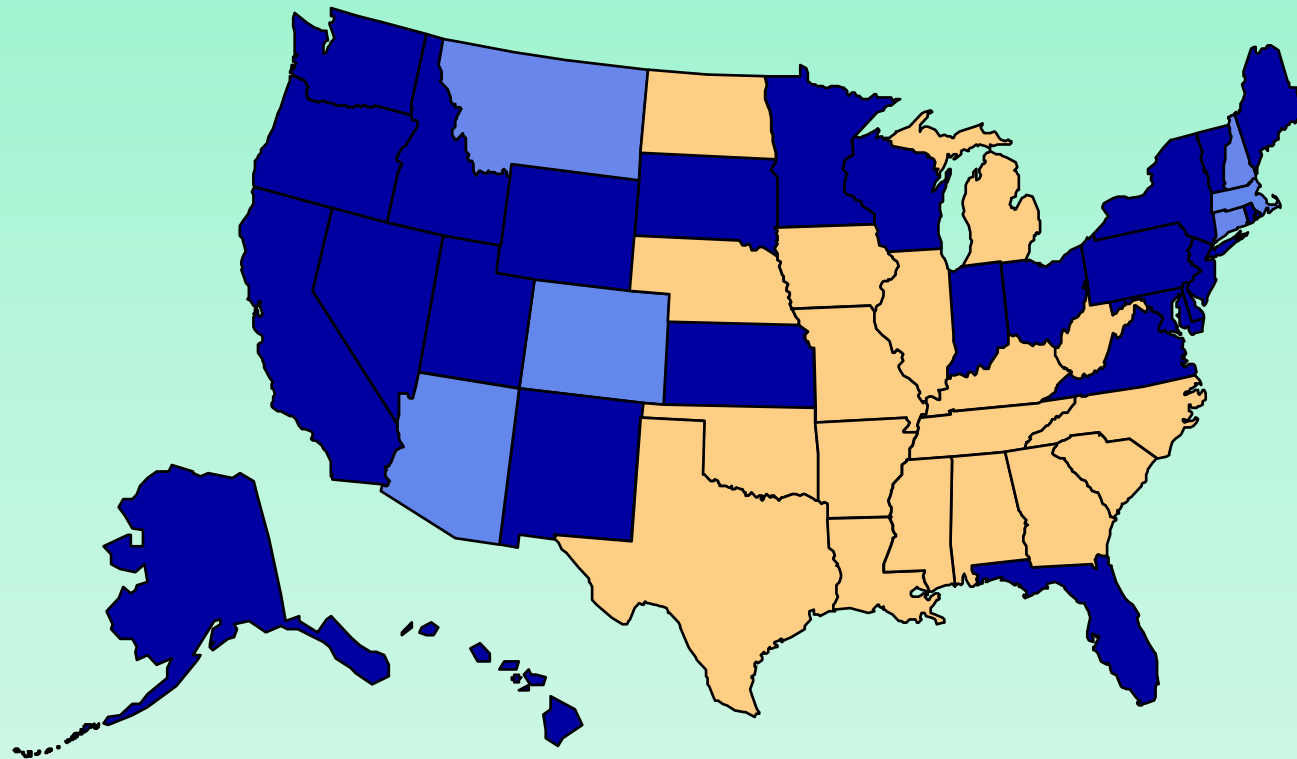


Obesity Trends* Among U.S. Adults

BRFSS, 1999



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

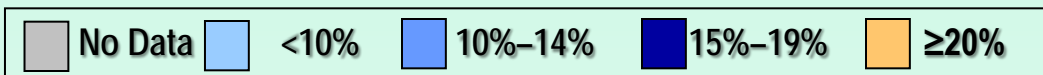
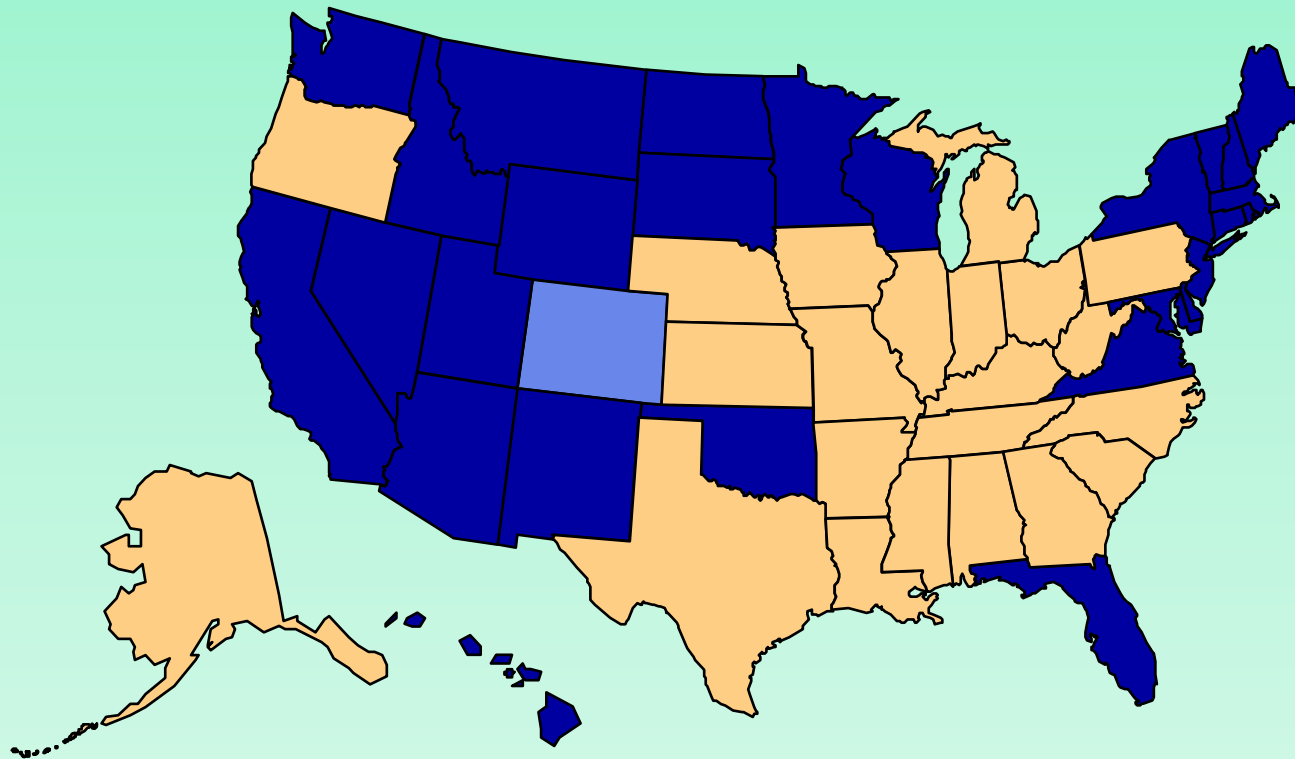


Obesity Trends* Among U.S. Adults

BRFSS, 2000



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

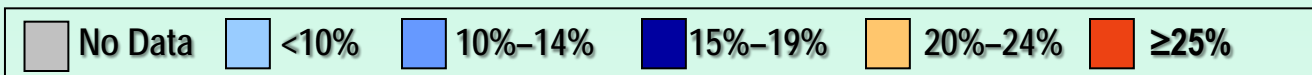
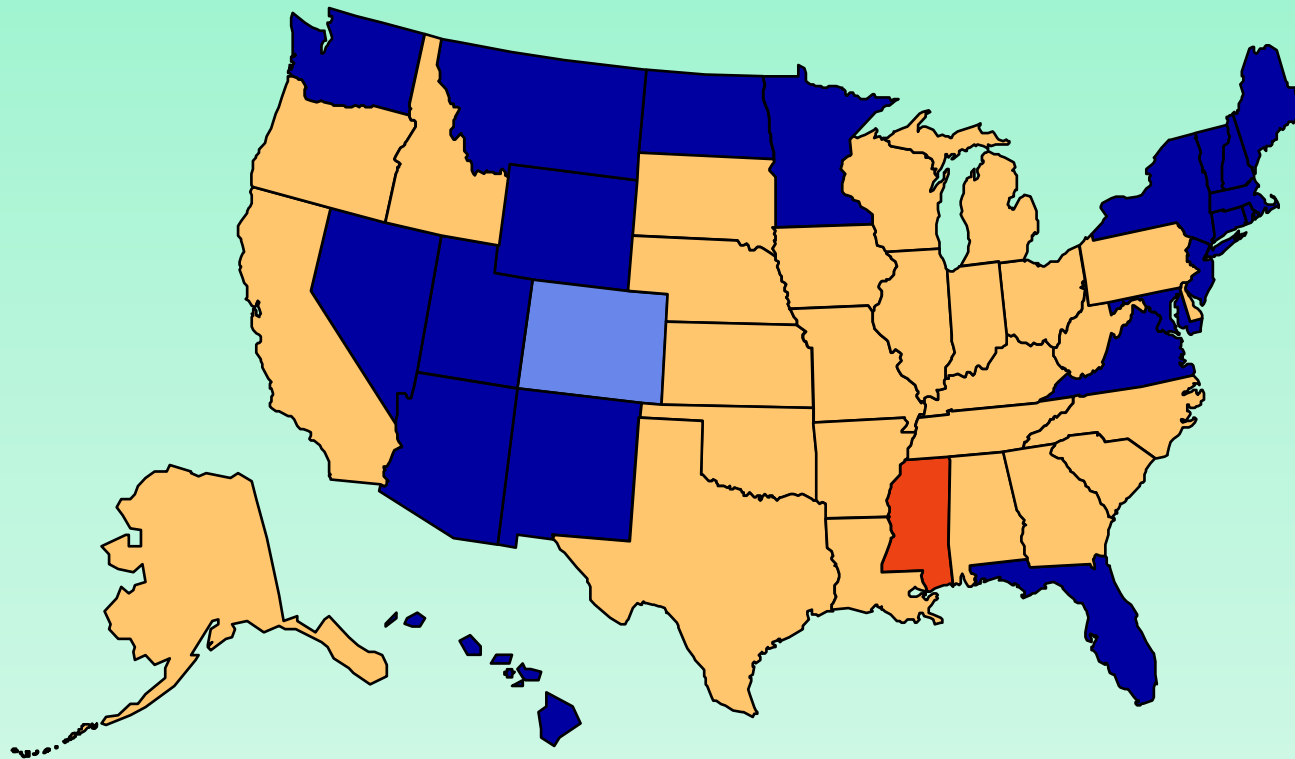


Obesity Trends* Among U.S. Adults

BRFSS, 2001



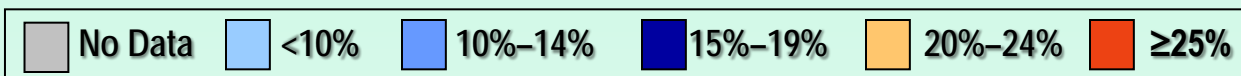
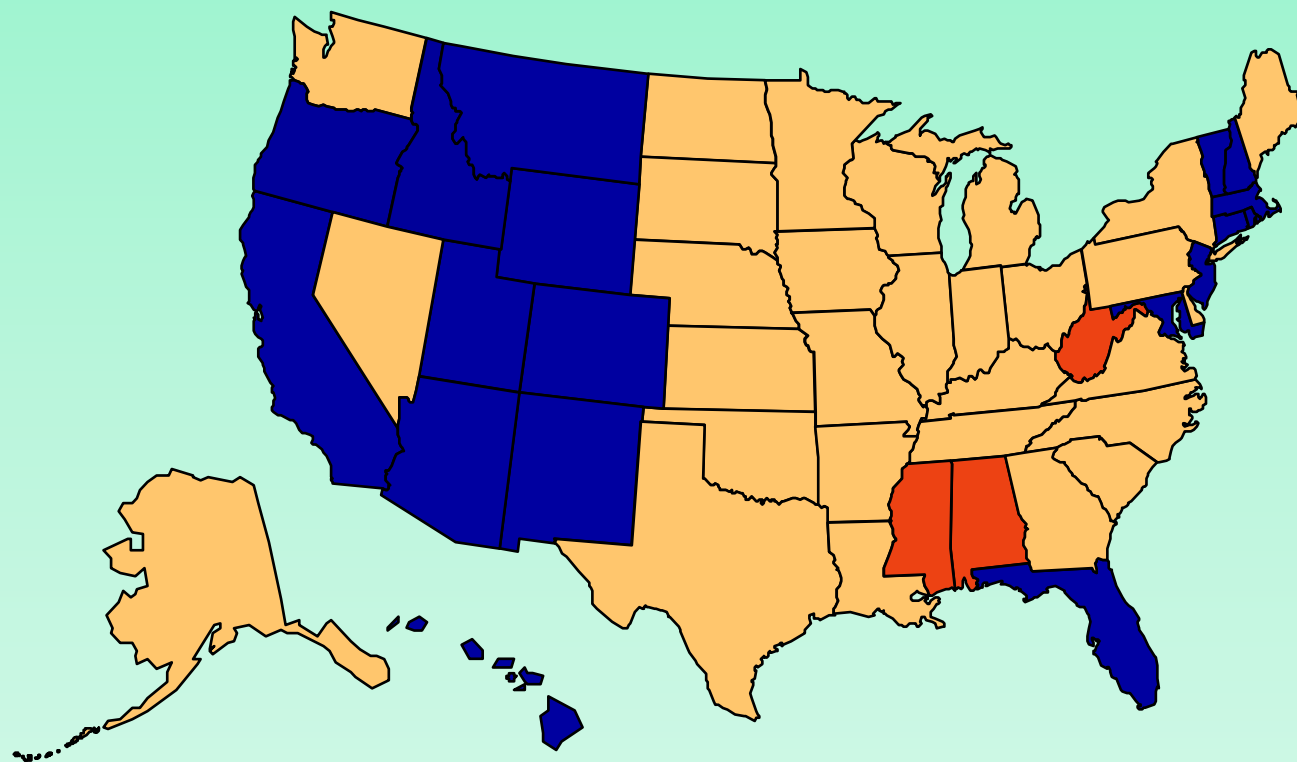
(*BMI ≥ 30 , or ~ 30 lbs overweight for 5' 4" person)



Obesity Trends* Among U.S. Adults

BRFSS, 2002

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

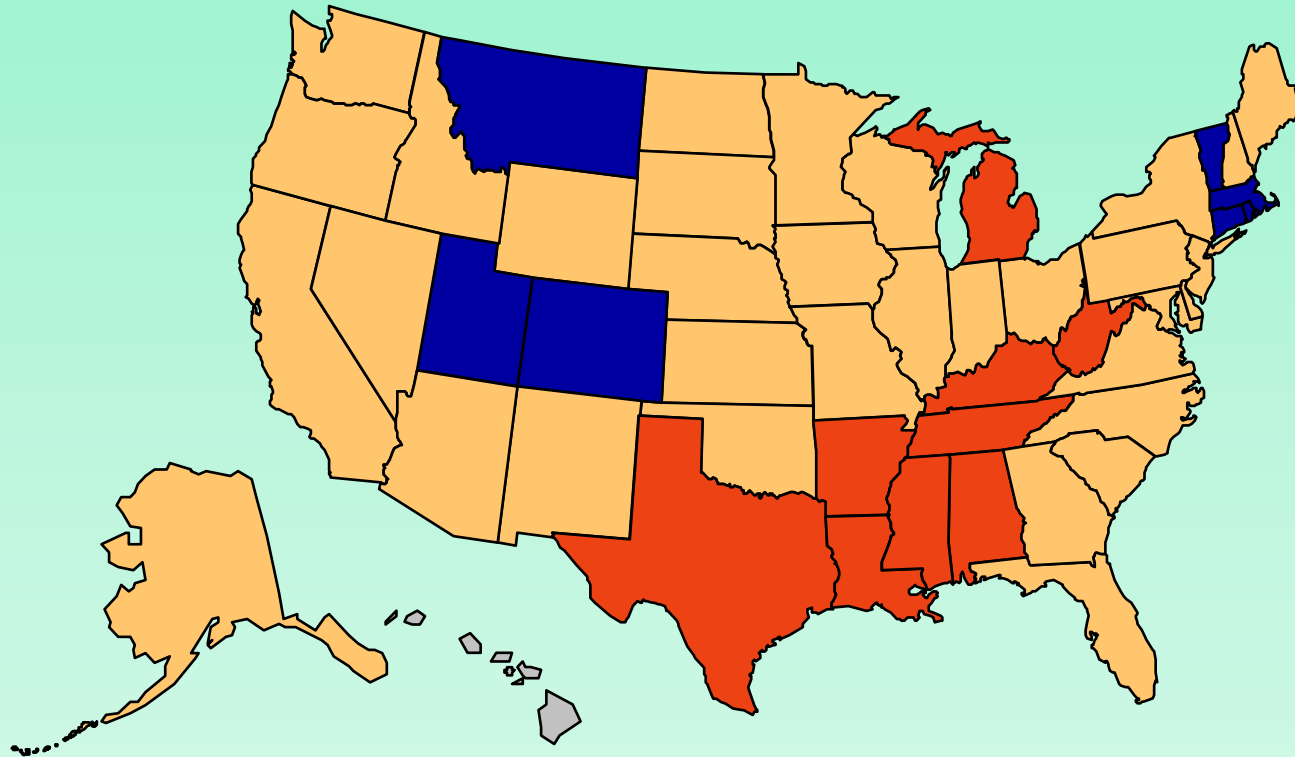


Obesity Trends* Among U.S. Adults

BRFSS, 2004



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

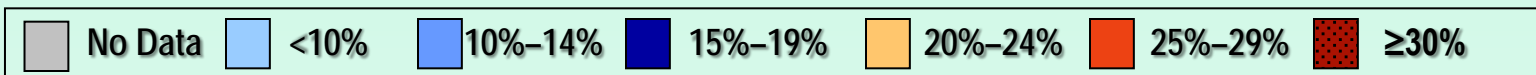
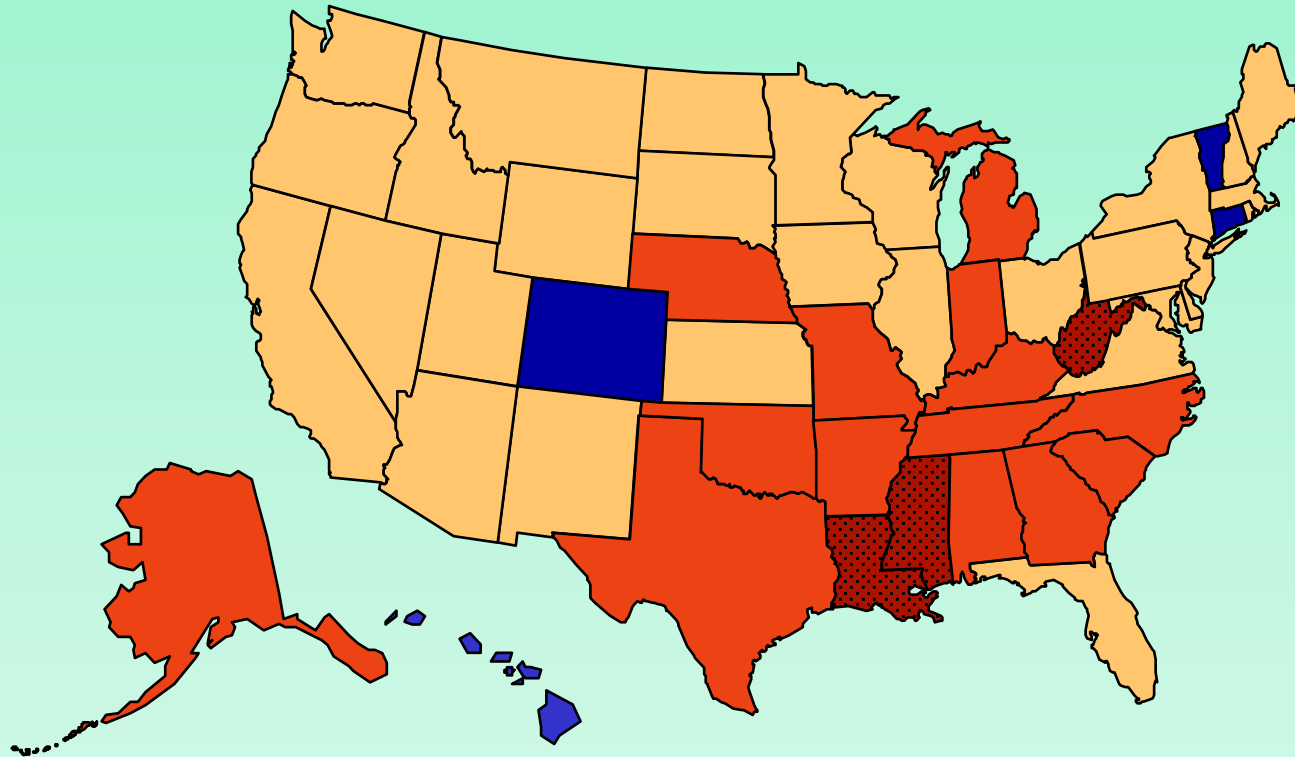


Obesity Trends* Among U.S. Adults

BRFSS, 2005



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



Is there a solution?

Current:

Weight-centered paradigm

New:

Weight-neutral paradigm





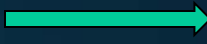
Weight –centered paradigm

Equates thinness with good health and
fatness with poor health



Weight-Centered Paradigm

➤ Assumes:

- Calories in  Calories out
- Weight loss for overweight or obese people will lead to improved health
- Sustained weight loss is achievable for everyone with enough will power and motivation



Weight-neutral paradigm

Promotes health for ALL sizes and focuses on the adoption of healthy lifestyles for the sake of physical, mental, and spiritual well-being, rather than weight control



Weight-Neutral Paradigm

- Accepts:
 - Natural diversity of body shapes and sizes
- Recognizes:
 - Health as multi-dimensional
- Promotes:
 - Intuitive eating
 - Enjoyable physical activity
 - Health for ALL Sizes



Can 'fat' people be healthy?!

- The evidence says yes...
 - About half of overweight adults and almost one third of obese adults in the US are metabolically healthy¹
 - Close to 30% of Italian obese adults are metabolically healthy²
- See lit review by Sims on the metabolically normal obese³

¹ Wildman et al., *Arch Intern Med.* 2008;168(15):1617-1624

² Iacobellis et al., *Obesity Research*, 2006; 13(6): 1116-1122

³ Sims, *Metabolism*, 2001; 50(12): 1499-1504



SHIFTING THE FOCUS.....



**AWAY FROM
WEIGHT**

**TOWARD HEALTH
REGARDLESS OF SIZE**



Intuitive Eating

- More than:
 - the absence of disordered eating
 - avoiding calorie restriction
 - the absence of dieting
- Responding to internal cues
 - Physiological hunger
 - Satiety
- Savoring and appreciating good food



Intuitive Eating Principles

1. Reject the diet mentality
2. Honor hunger
3. Make peace with food
4. Challenge the 'food police'
5. Respect fullness
6. Discover the satisfaction factor
7. Honor feelings without using food
8. Respect your body
9. Exercise --*feel* the difference
10. Honor your health

Tribole, E., & Resch, E., 2003



Intuitive Eaters

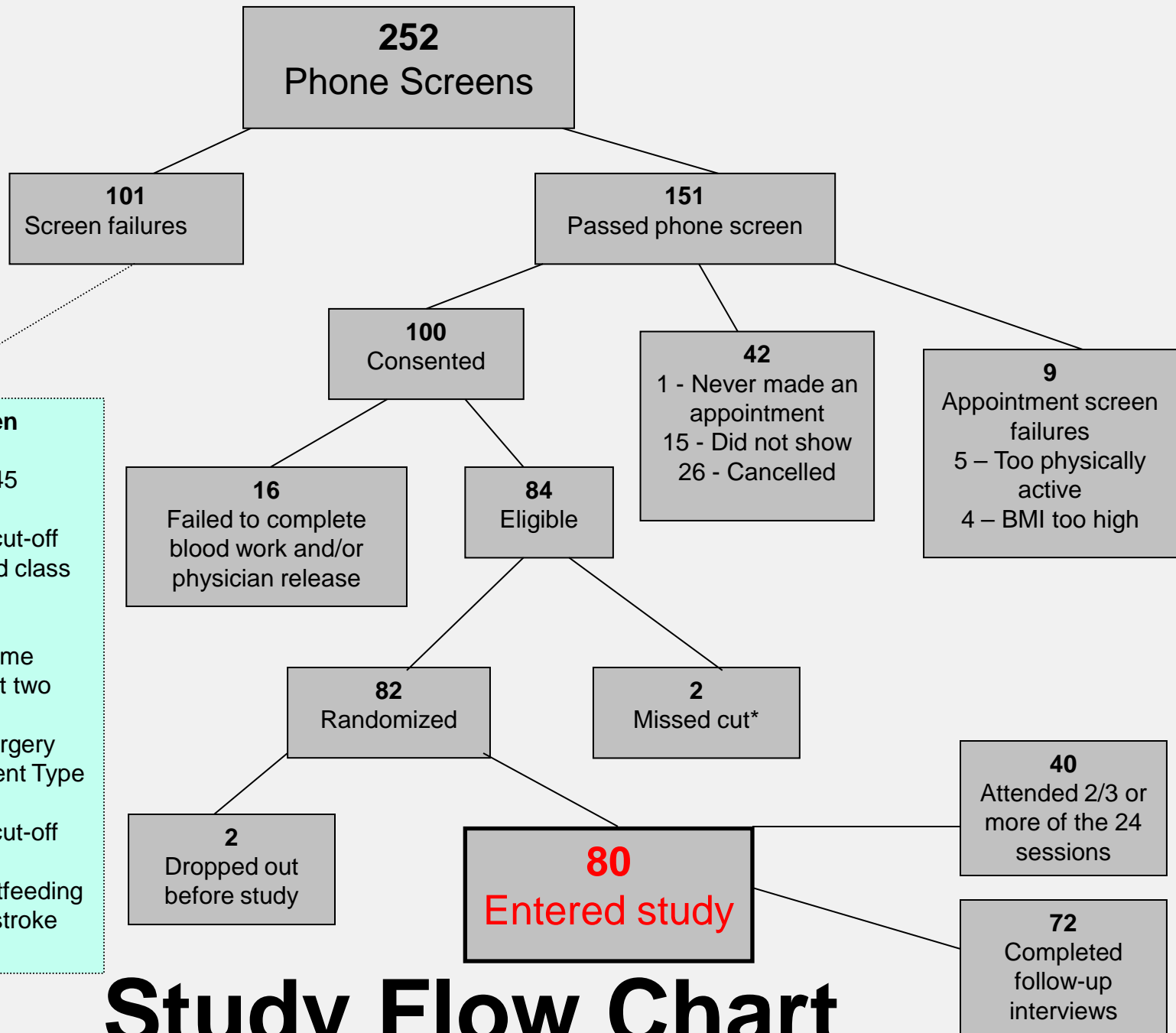
- Tend to have:
 - Higher self-esteem
 - Proactive coping skills
 - Greater optimism
 - Greater satisfaction with life
 - Lower Body Mass Index
 - Less body dissatisfaction



Our Study

- Randomized Controlled Trial
- Standard Care:
 - Behavioral-based weight loss
- Experimental treatment:
 - Health at every size
- 80 women enrolled
- 24 group sessions
- Met weekly for 90 minutes

- Reasons for Screen Failures:**
- 24 – BMI exceeds 45
 - 21 – Smokers
 - 20 – Over the age cut-off
 - 9 – Could not attend class times
 - 8 – BMI below 30
 - 5 – Wanted to become pregnant within next two years
 - 4 – Had bariatric surgery
 - 3 – Insulin Dependent Type II Diabetes
 - 3 – Under the age cut-off
 - 1 – Cancer
 - 1 – Currently breastfeeding
 - 1 – Past history of stroke
 - 1 – Type I Diabetes



Study Flow Chart



Participants

- Mean age 39.6 years (range 30-45)
- 70% were married
- 74% had children
- 96% were White
- 65% had at least some college education
- 61% were employed full-time
- Mean household income \$70,873
- Mean BMI 38.6 (range 30.2 - 44.8)



Participant health status

- Mean Systolic BP: 126.24 mmHg (SD = 10.99)
 - 11% high (≥ 140 mmHg)
- Mean Diastolic BP: 79.66 mmHg (SD = 8.86)
 - 11% high (≥ 90 mmHg)
- Mean HDL: 46.91 (SD = 13.20)
 - 32.5% low (< 40)
- Mean LDL: 120.09 (SD = 33)
 - 12.5% high (≥ 160)
- Mean Total Cholesterol: 197.00 (SD = 40.62)
 - 42.5% high (≥ 200)
- Mean Fasting Blood Glucose: 99.76 (SD = 32.63)
 - 28.8% above 99



Participant Eating Behaviors

- 63% engaged in binge eating behaviors
- 41% noted feeling out of control while doing it
- 8% met the clinical diagnosis for Binge Eating Disorder
- 43% were dieting to lose or maintain weight at least “some of the time”
- 24% were eating 2 or more servings of vegetables per day at least “some of the time”
- 46% were eating 2 or more servings of fruits per day at least “some of the time”



Measures

- Intuitive Eating Scale
- Rosenberg Self-Esteem Scale
- Three Factor Eating Questionnaire – R18
- Depression, Anxiety, Stress Scale
- Eating Disorder Examination Questionnaire
- Red Lotus Health and Well Being Questionnaire
- Stanford Brief Activity Survey



Intuitive Eating & Psychosocial measures

- Self Esteem (RSES): $r = .43$; $p < .001$
- Depression (DASS21): $r = -.22$; $p = .052$
- Anxiety (DASS21): $r = -.19$; $p = .088$
- Stress (DASS21): $r = -.20$; $p = .073$
- Health and well-being status: $r = .02$; $p = .859$
- Health and well-being behaviors: $r = .28$; $p = .012$



Intuitive Eating & Disordered Eating

- Uncontrolled Eating (TFEQ-R18): $r = -.60$; $p < .001$
- Emotional Eating (TFEQ-R18): $r = -.63$; $p < .001$
- Number of days binged (EDE-Q): $r = -.25$; $p = .027$
- Weight Concern (EDE-Q): $r = -.45$; $p < .001$
- Shape Concern (EDE-Q): $r = -.47$; $p < .001$
- Eating Concern (EDE-Q): $r = -.61$; $p < .001$
- Restraint (EDE-Q): $r = -.10$; $p < .382$
- Global Disordered Eating (EDE-Q): $r = -.55$; $p < .001$



THE INTERVENTIONS



Behavior-based Weight Loss

➤ LEARN (Brownell, K., 2000)

- Lifestyle, Exercise, Attitudes, Relationships, and Nutrition
- Gradual and balanced lifestyle change
- Evidence-based gold-standard for weight control
- Increase in physical activity
- Decrease in caloric intake
- Improved nutrition
- Primary Goal – Weight loss



Health at Every Size

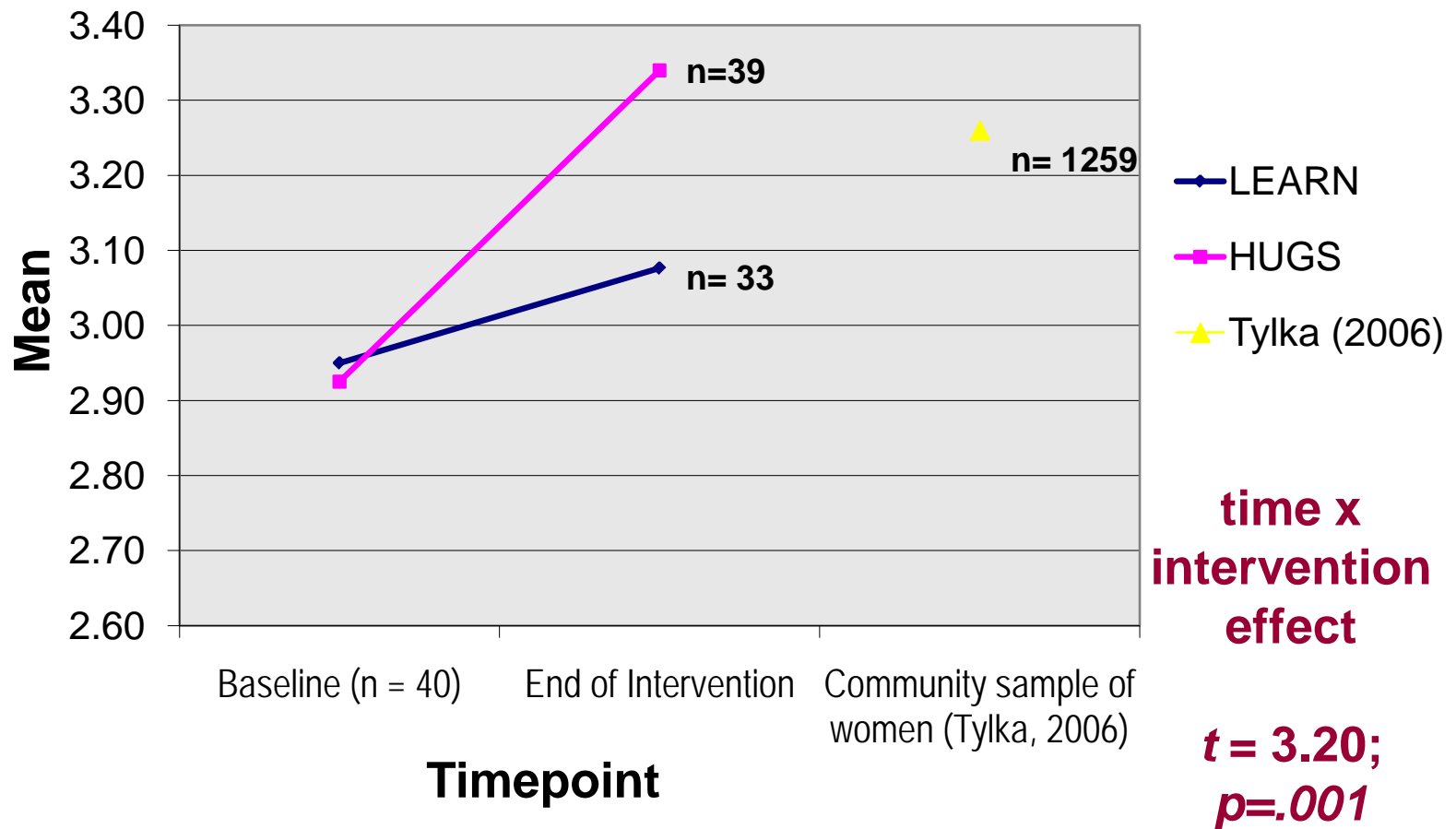
➤ HUGS (Omichinski. L., 2007)

- Hhealth focused, Understanding lifestyle, Group supported, and Self Esteem building
- Intuitive eating
- Enjoyable physical activity
- Improved nutrition
- Self-care
- Self acceptance
- Primary goal – Improved health and well-being

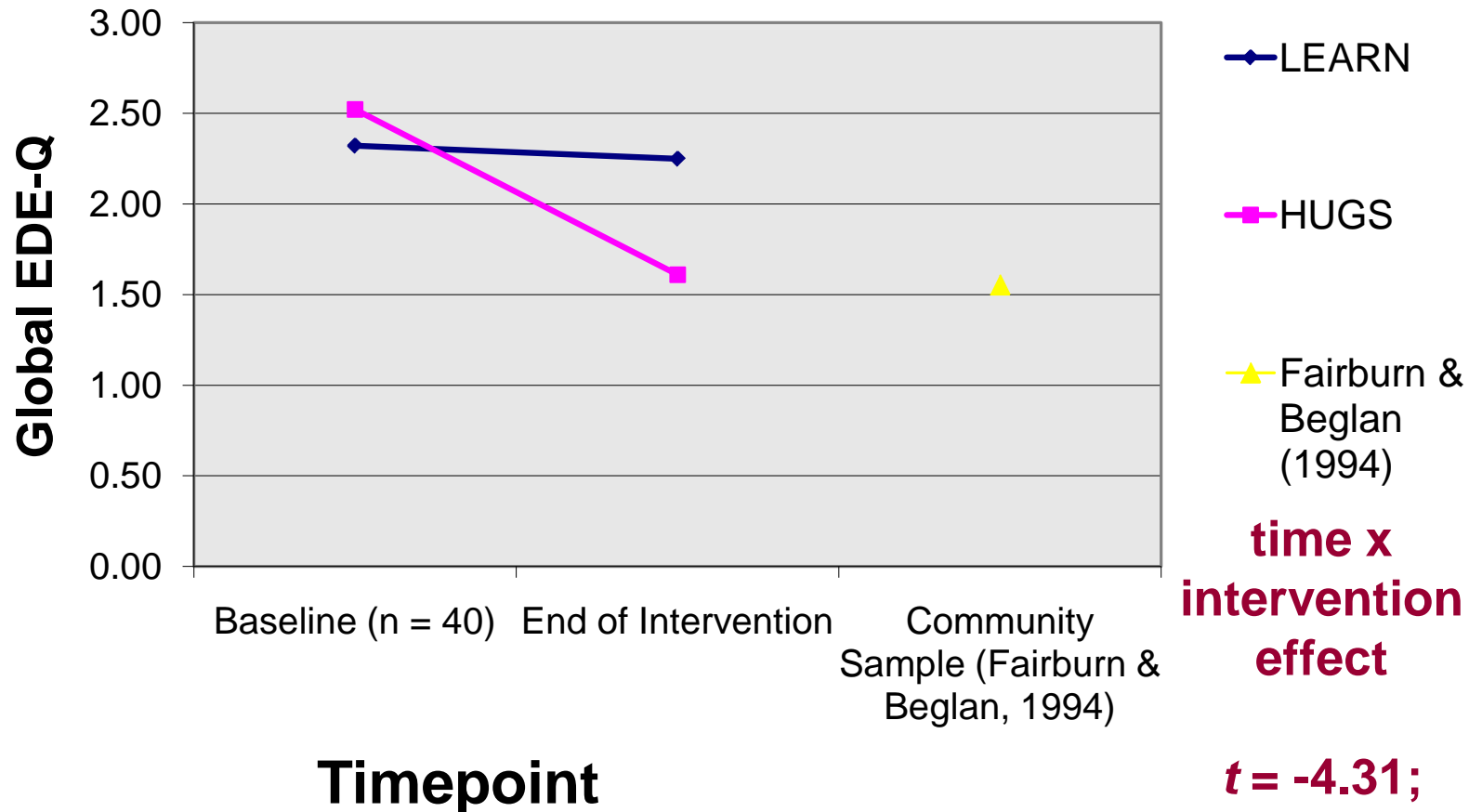


RESULTS

Intuitive Eating

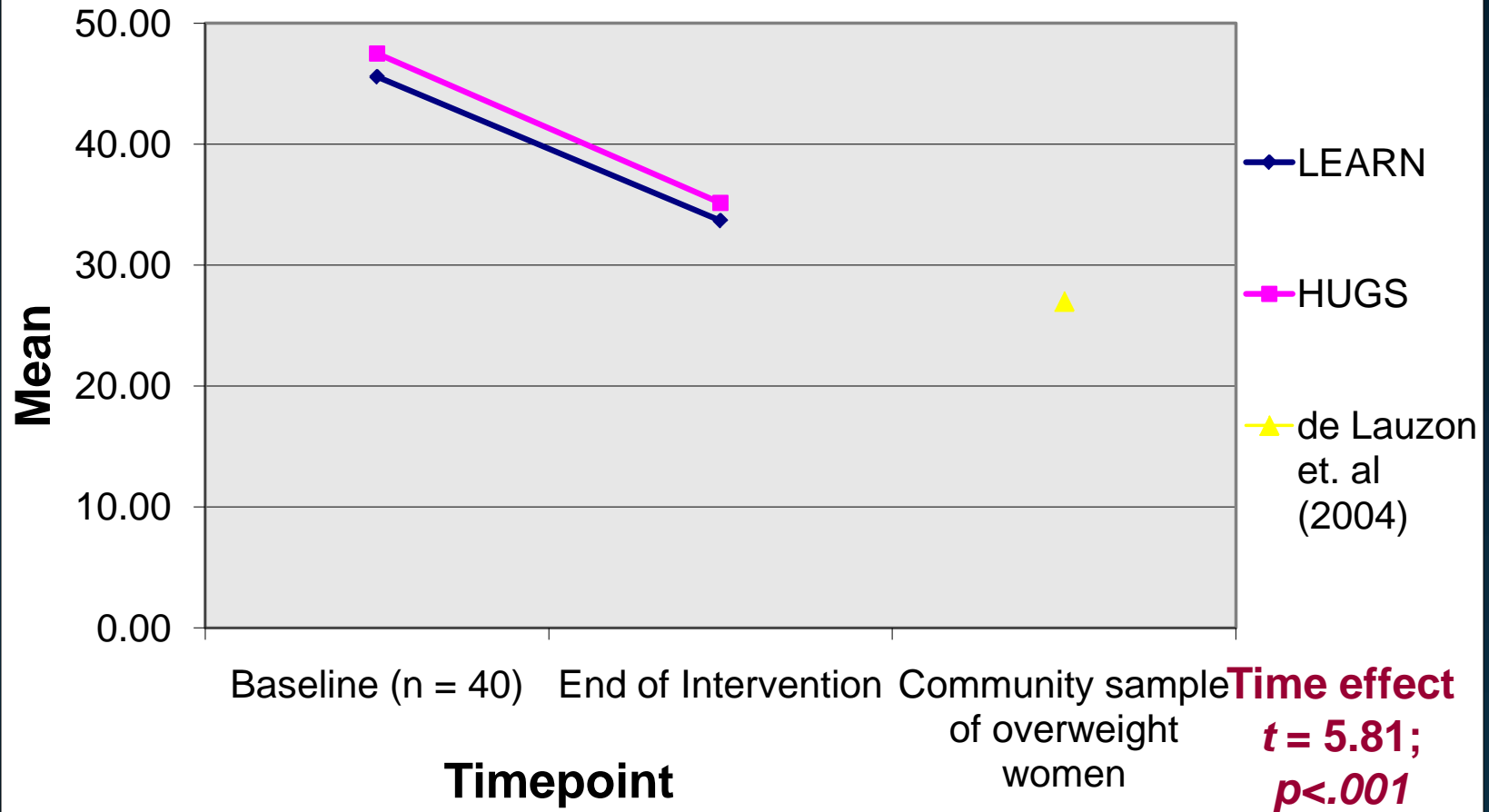


Global Disordered Eating Attitudes and Behaviors

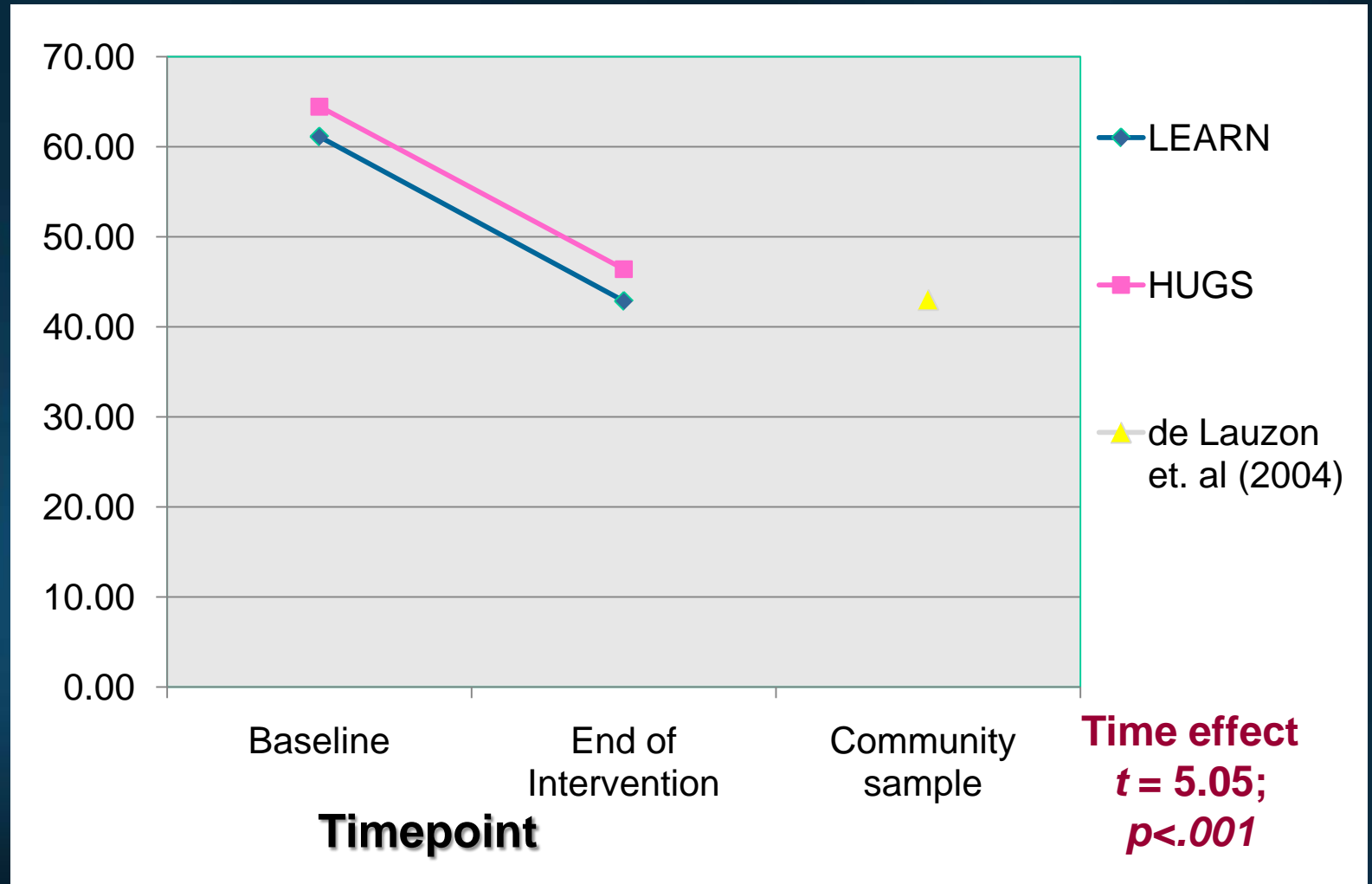


**time x
intervention
effect**
 $t = -4.31$;
 $p < .001$

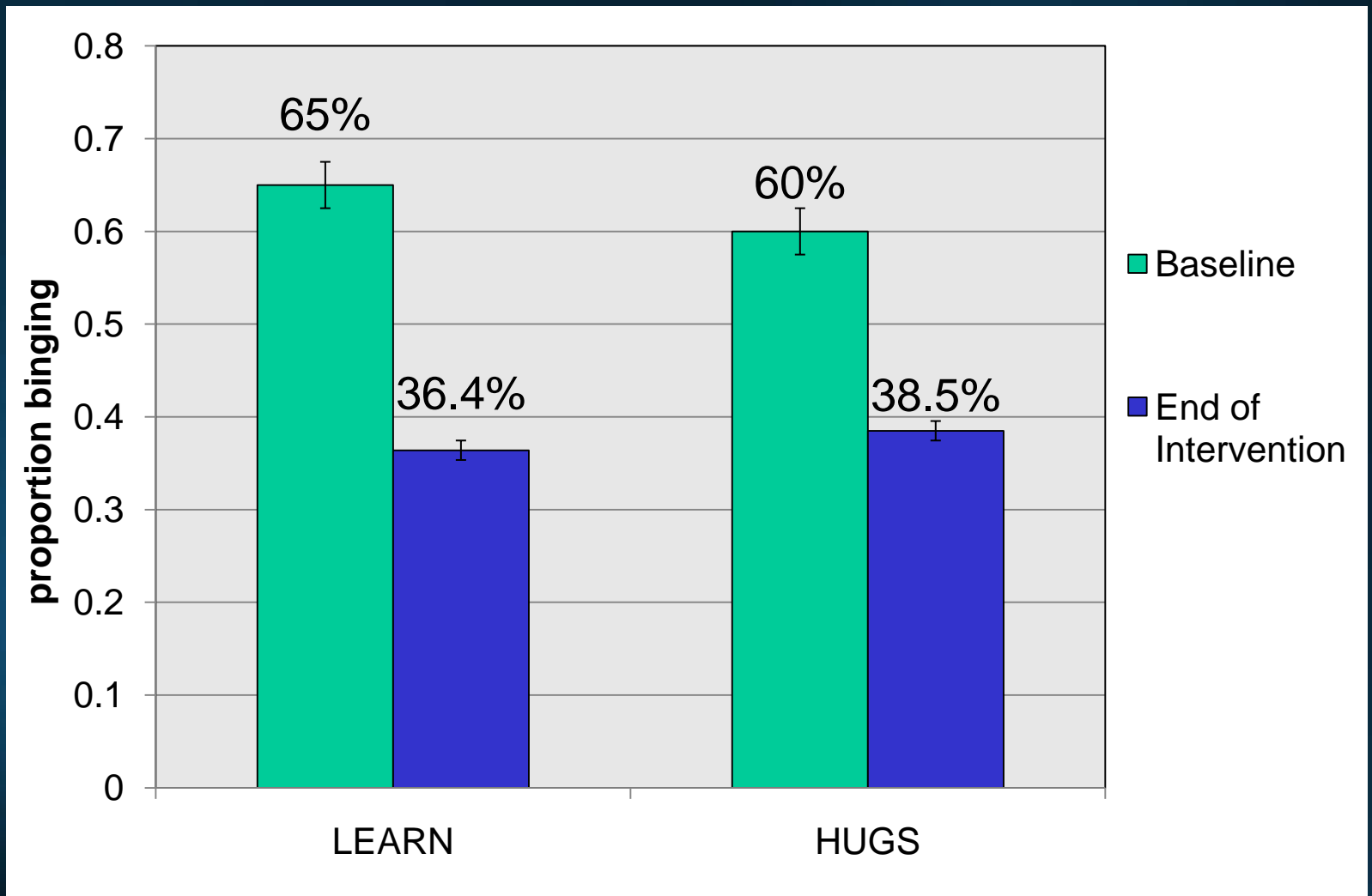
Uncontrolled Eating



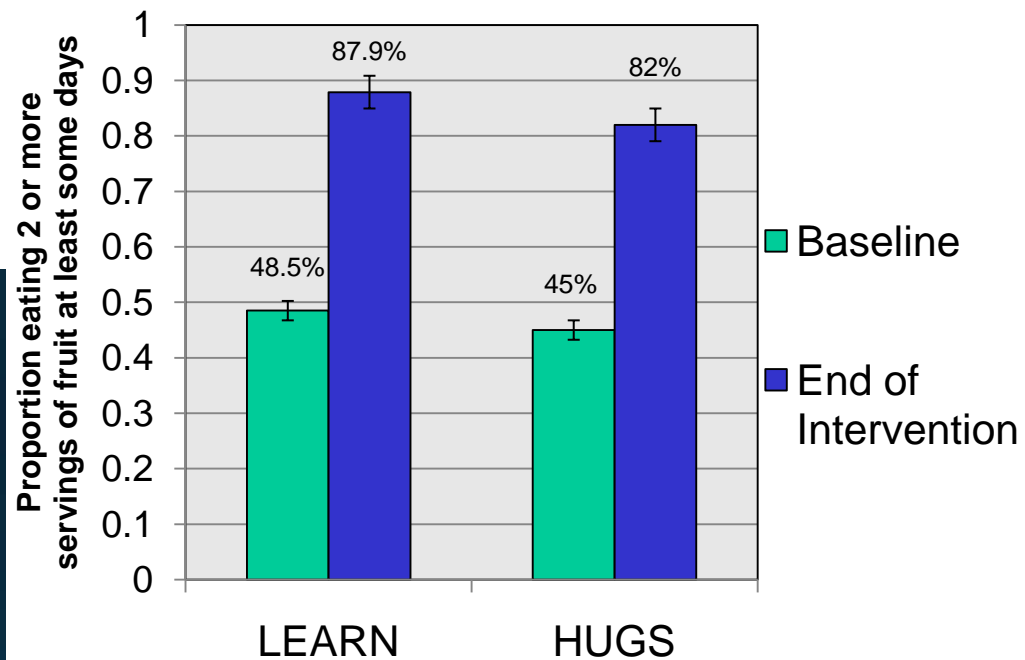
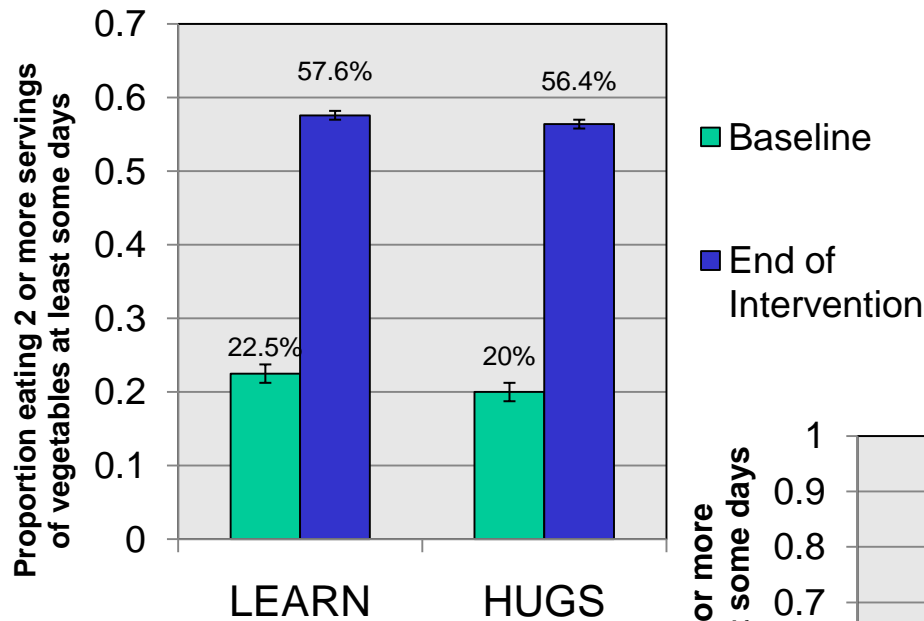
Emotional Eating



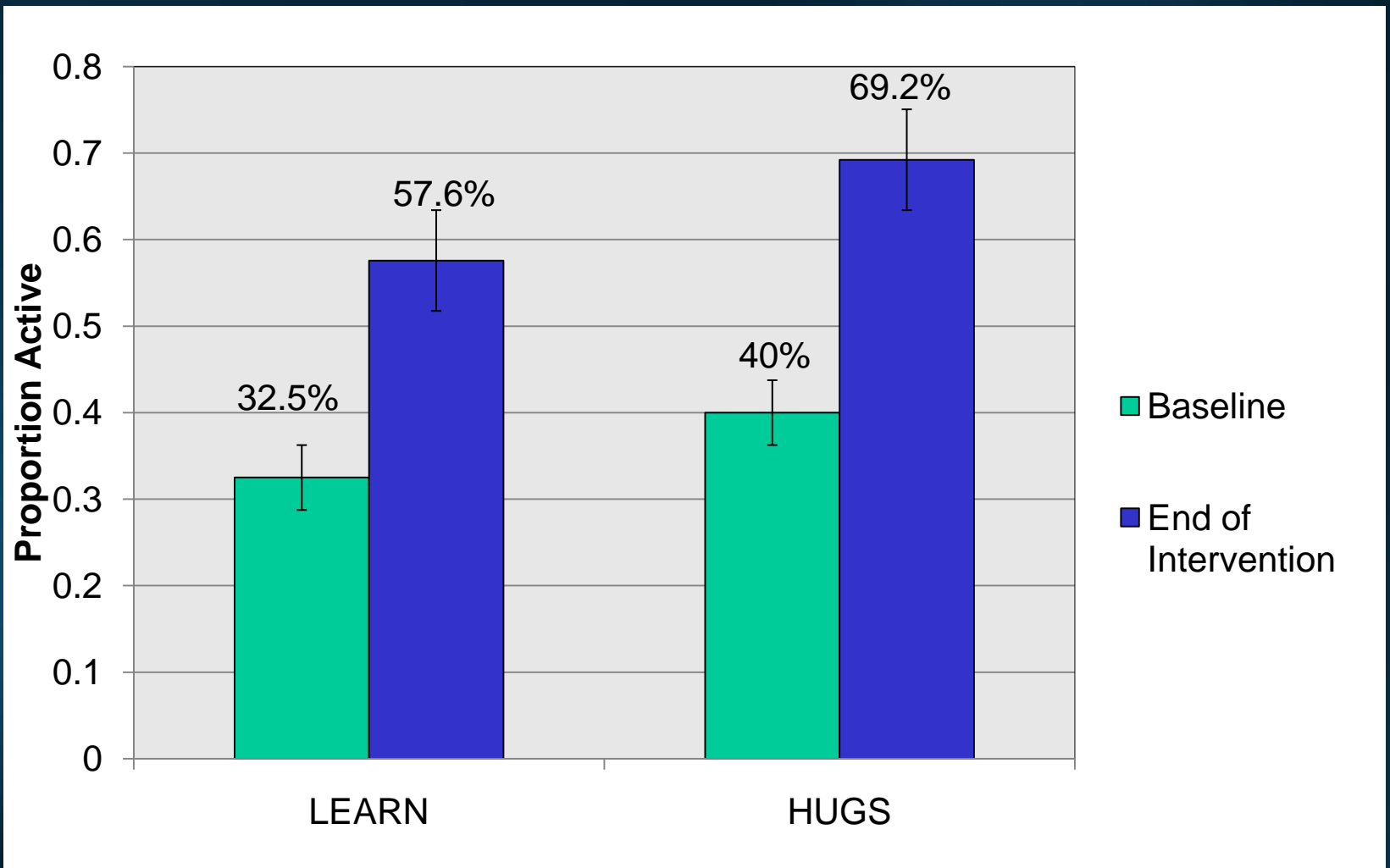
Binge eating



Fruit & Vegetable Consumption



Physical Activity





Summary

- Health at every size improved intuitive eating significantly more than weight control
- Health at every size improved global disordered eating scores significantly more than weight control
- Health at every size and weight control improved uncontrolled eating, emotional eating, binge eating, physical activity levels, and fruit and vegetable consumption




Conclusion

- Health at every size interventions adopting intuitive eating and body acceptance elicit adaptive eating patterns among obese women
- In light of the limited long term success of weight loss interventions, healthcare practitioners should help their overweight and obese patients learn the principles intuitive eating and health at every size
- Focusing on weight leads to discrimination, body shame and stigmatization
- Focusing on health leads to improved well-being



Many thanks to my collaborators & supporters

- James Ku, MD - Co-Principal Investigator
- Kelly Bliss, MEd - HUGS facilitator
- Ann Wellock, RD - LEARN facilitator
- Linda Omichinski, RD - developer of HUGS donated all books and course materials for participants
- Kelly Lopez - Study Coordinator baseline and intervention
- Heather Close, BS - Study Coordinator follow-ups
- Elizabeth Marks - Student Intern
- The Reading Hospital and Medical Center, Weight Management Center and Laboratory Services
- The Edna G. Kynett Foundation, Sponsor



I would also like to thank the **Association for Size Diversity and Health**, and the work of Dr. Linda Bacon for helping me clarify and further understand the health at every size approach, as well as the importance and need for promoting the shift to the weight-neutral paradigm.

For further information, please see:

<http://www.sizediversityandhealth.org/>

<http://www.haescommunity.org/>

<http://www.lindabacon.org/>

