

Obesity in Sampson County



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

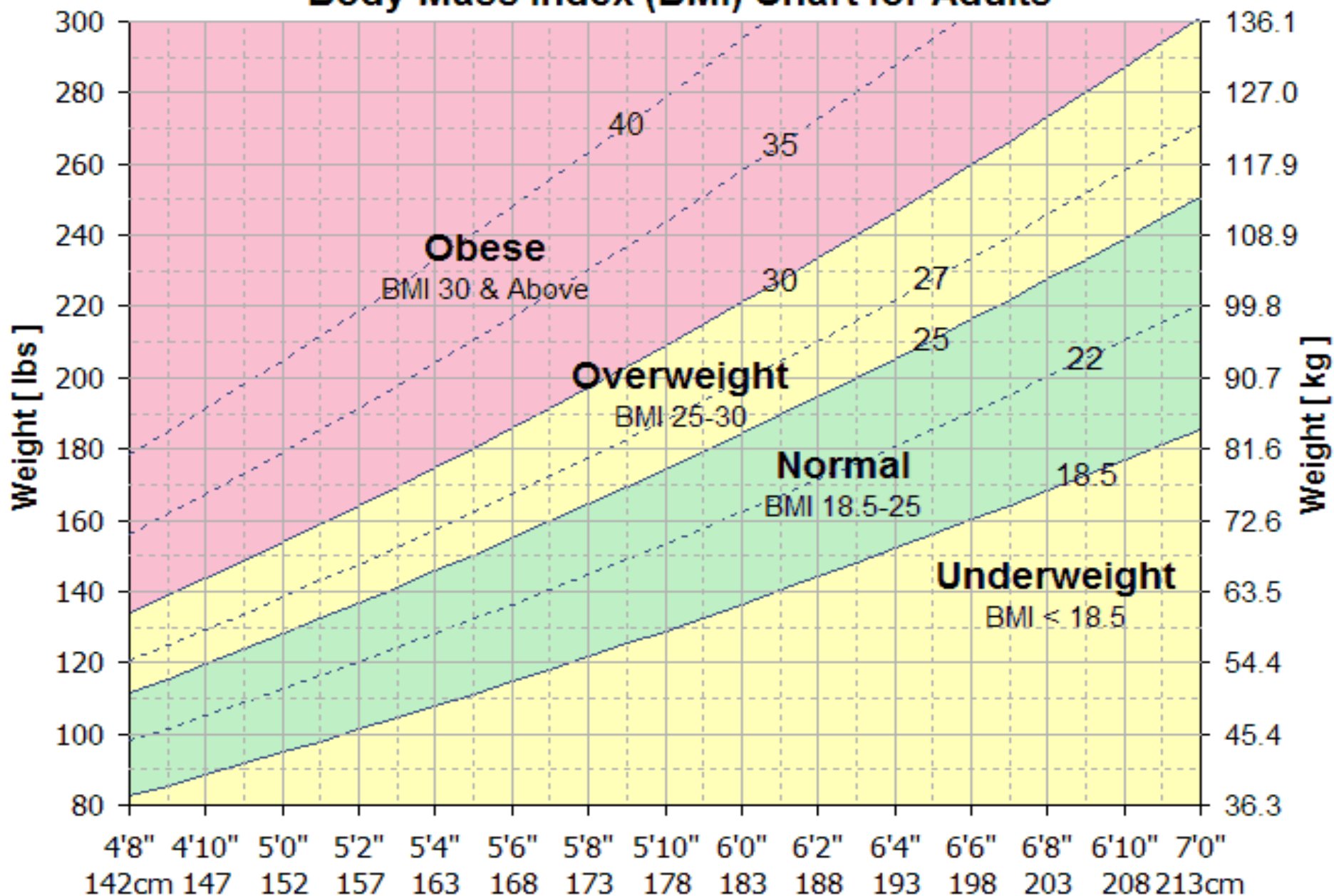
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Defining Obesity

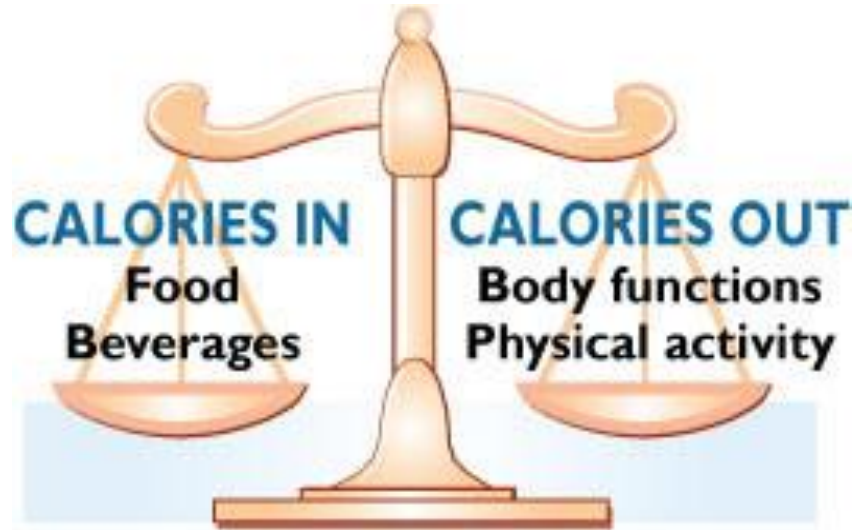
- WHO defines as “abnormal or excessive fat accumulation that may impair health.¹”
- Adult Body Mass Index
 - Weight (kg) / height (m²)
 - BMI \geq 25 = Overweight
 - BMI \geq 30 = Obese
- Child Body Mass Index²
 - Age and sex percentiles
 - BMI \geq 85TH percentile = Overweight
 - BMI \geq 95th percentile = Obese
- No current % body fat to define obesity

Body Mass Index (BMI) Chart for Adults



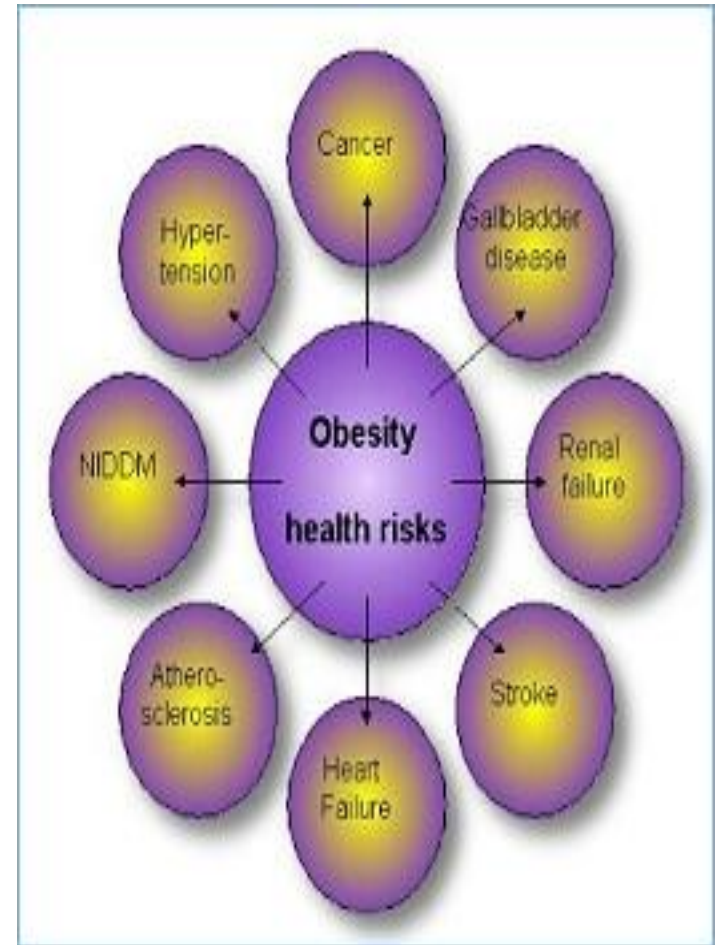
Risk Factors

- Genetics
- Environment
- Behavior
- Psychological
- Medications
- Culture & Socioeconomic Status



Health Consequences

- Increased risk of developing:
 - Type II Diabetes
 - Cardiovascular Disease
 - Cancer
 - Pulmonary diseases
 - Osteoarthritis
 - Dyslipidemia
 - Psychological & Emotional consequences
- Medical Costs



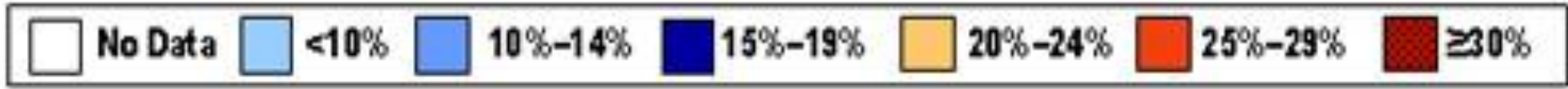
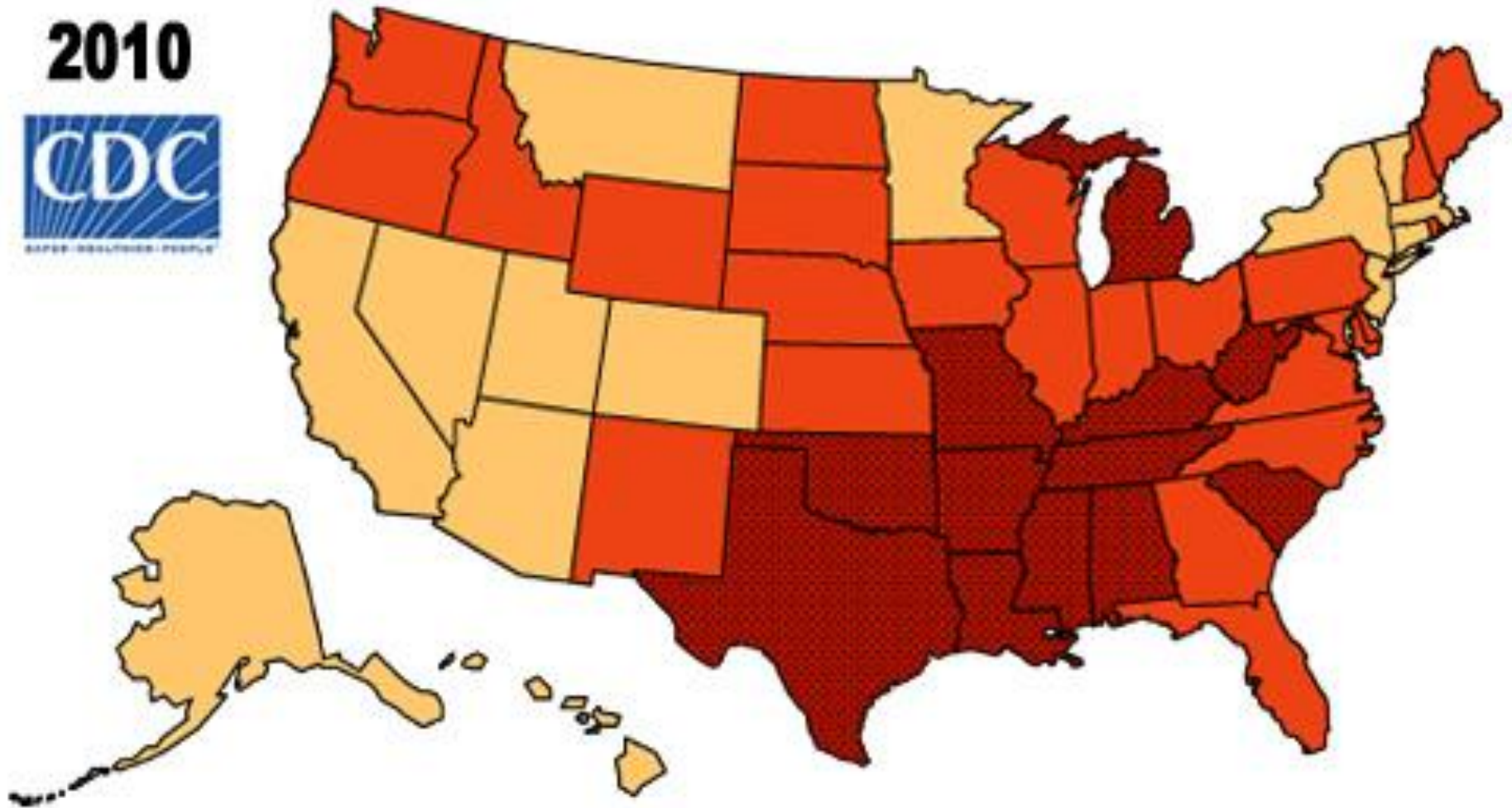
Treatment



- Diet
- Exercise
- Behavior Modification
- Medical Management
 - Medications, surgery

Obesity Statistics

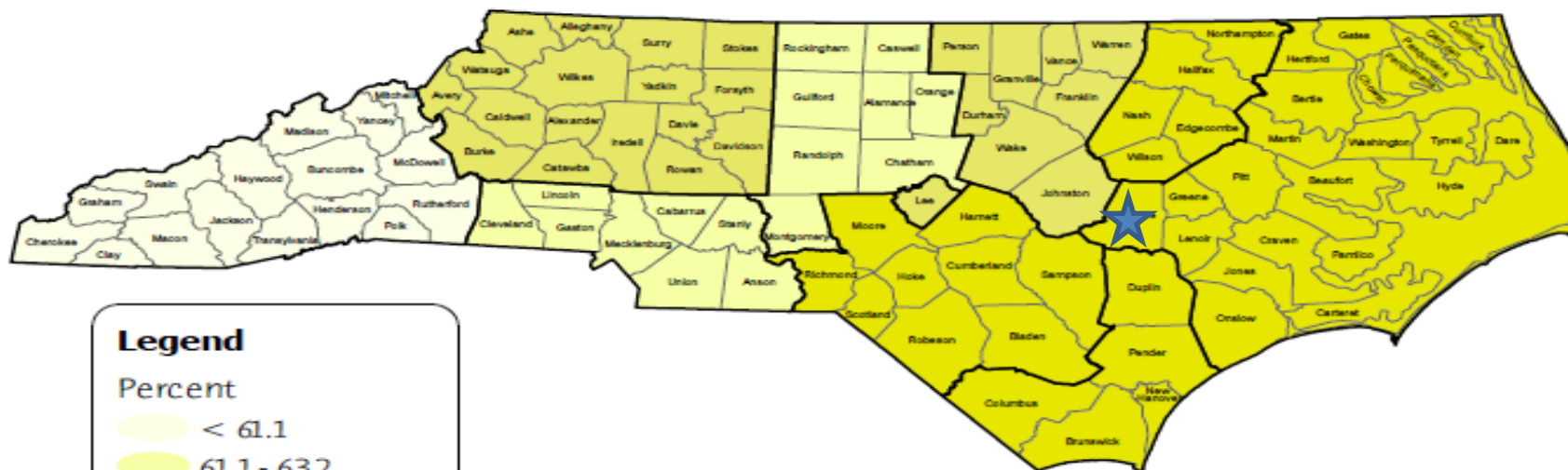
2010



North Carolina Adult Obesity



Percentage of North Carolina Adults Who Are Overweight or Obese* by Area Health Education Center (AHEC) Regions



Legend

Percent

- < 61.1
- 61.1 - 63.2
- 63.3 - 66.0
- > 66.0

AHEC Regions

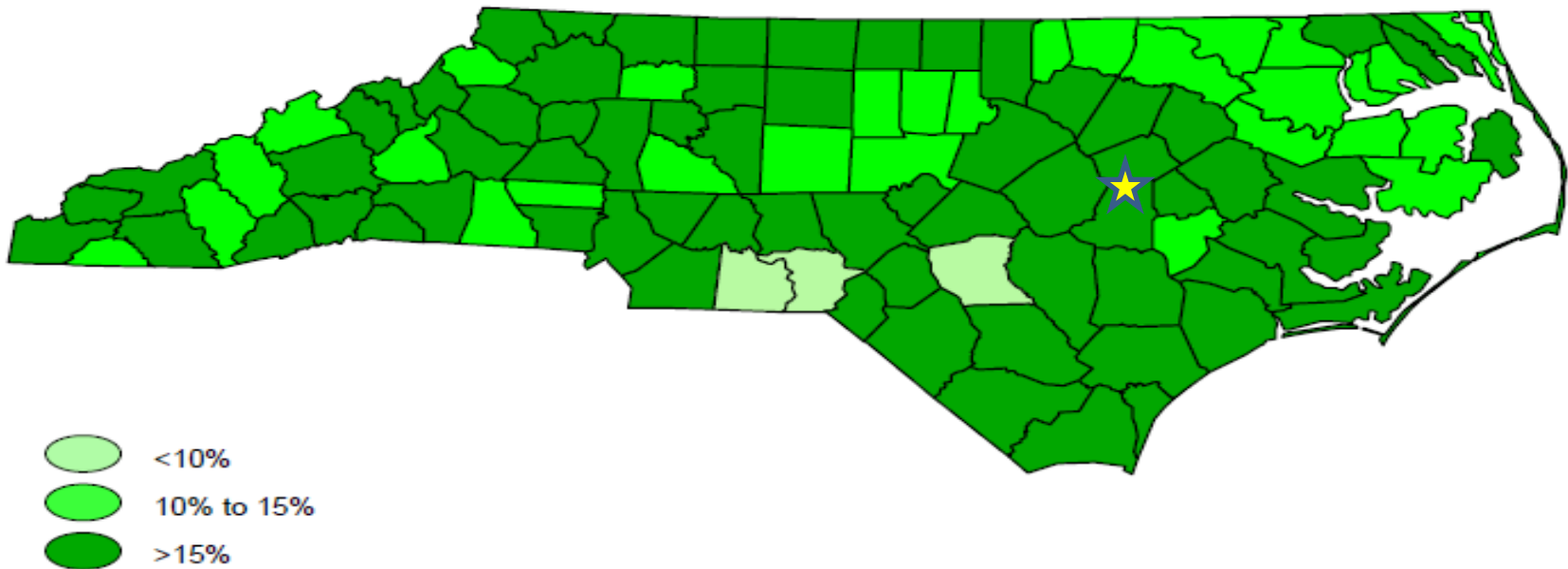
County Boundary

Source: 2009 Behavioral Risk Factor Surveillance System (BRFSS)

*Body mass index is computed as weight in kilograms divided by height in meters squared: (kg/ m²). BMI is an intermediate variable used in defining overweight and obesity. Underweight=BMI less than 18.5, Recommended Range= BMI 18.5 to 24.9, Overweight= BMI 25.0 to 29.9 and Obese= BMI greater than 30.0

North Carolina Childhood Obesity

Percentage of Overweight Children¹, 2-18 Years of Age
NC-NPASS² 2009



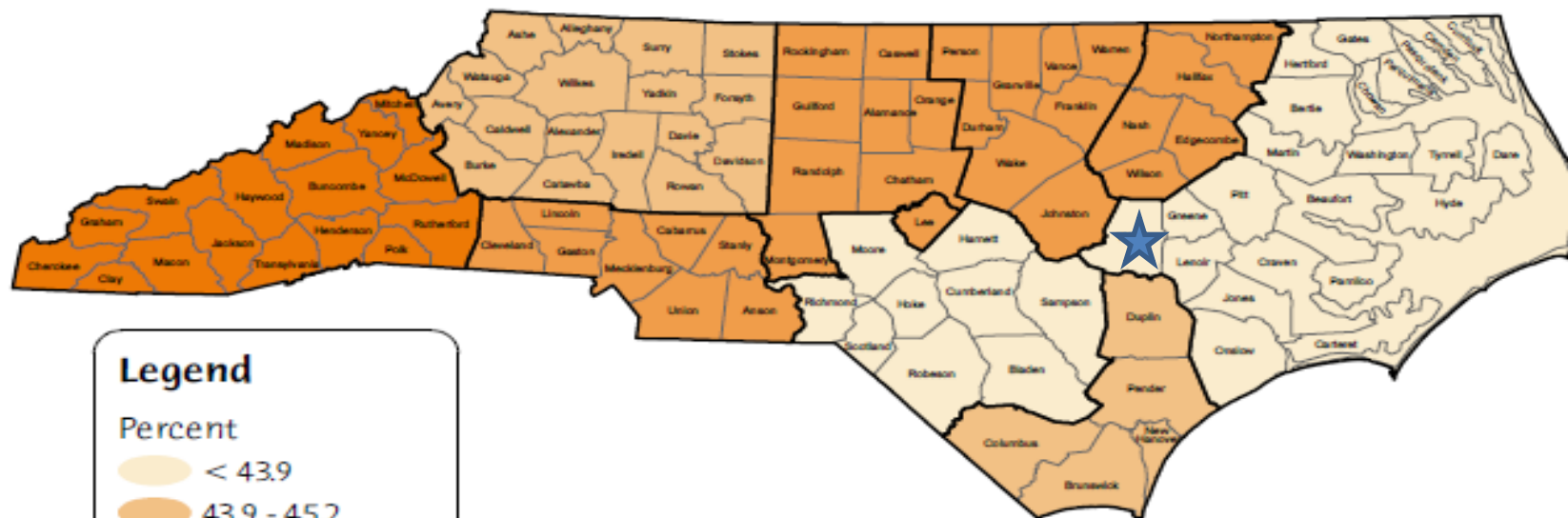
¹BMI-for-Age Percentiles ≥ 85 th and < 95 th Percentile

²North Carolina-Nutrition and Physical Activity Surveillance System (NC-NPASS) is limited to data on children seen in North Carolina Public Health Sponsored WIC and Child Health Clinics and some School Based Health Centers. Percentiles were based on the CDC/NCHS Year 2000 Body Mass Index (BMI) Reference.

North Carolina Physical Activity



Percentage of North Carolina Adults Who Are Meeting Daily Physical Activity Requirements* by Area Health Education Center (AHEC) Regions



Legend

Percent

- < 43.9
- 43.9 - 45.2
- 45.3 - 48.4
- > 48.4
- AHEC Regions
- County Boundary

Source: 2009 Behavioral Risk Factor Surveillance System (BRFSS)

*Moderate physical activity for 30 or more minutes per day, five or more days per week or vigorous physical activity for 20 or more minutes per day, three or more days per week.

Sampson County

- Rural vs Urban
 - Sampson County 85% rural; NC is 40%
- Rural Healthy People 2010
- Obese Adults
 - Sampson County = 36%
 - North Carolina = 29%
- Diabetes
 - Sampson County = 12%
 - North Carolina = 10%
- Physical Inactivity
 - Sampson County = 29%
 - North Carolina = 24%

Treatment: Exercise

- ACSM FITT Guidelines¹⁶

- Frequency
- Intensity
- Time
- Type

- CDC Guidelines¹⁷

- Guidelines for Children¹⁸



Treatment:

Exercise

- Special Considerations
 - Monitor Vitals
 - Orthopedic Injuries
- Benefits
 - Improved Cardiopulmonary Function
 - Reduced Risk for Coronary Artery Disease
 - Psychological Benefits

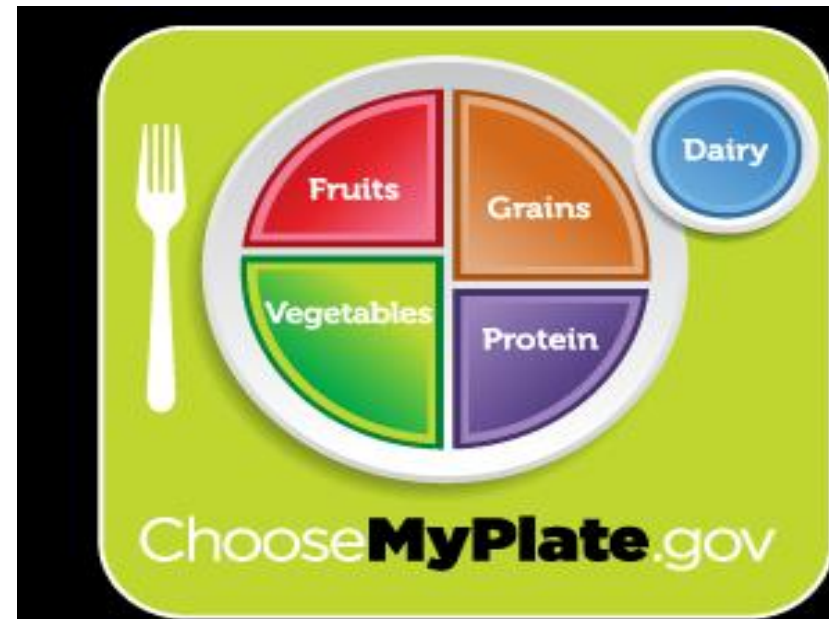
Treatment:

Diet

- \downarrow Calories Consumed + \uparrow Calories Expended = Weight Loss
- ACSM Guidelines¹⁶
- U.S. Department of Agriculture 2010 Guidelines²⁰
 - Limit Sodium < 1500mg/day
 - Limit Dietary Cholesterol < 300mg/day
 - Limit Trans Fatty Acids and Refined Sugars
 - Increase Vegetable and Fruit Intake
 - Increase Fat-Free Dairy
 - High Fiber Foods

CDC Dietary Guidelines

- Dietary Fat
 - Children 4-18 years old: 25-35% total calories
 - Adults: 20-35% total calories
- Protein
 - Children 4-18 years old: 19 grams/day
 - Women: 46 grams/day
 - Men: 56 grams/day
- Water
- The DASH Eating Plan
- ChooseMyPlate.Gov



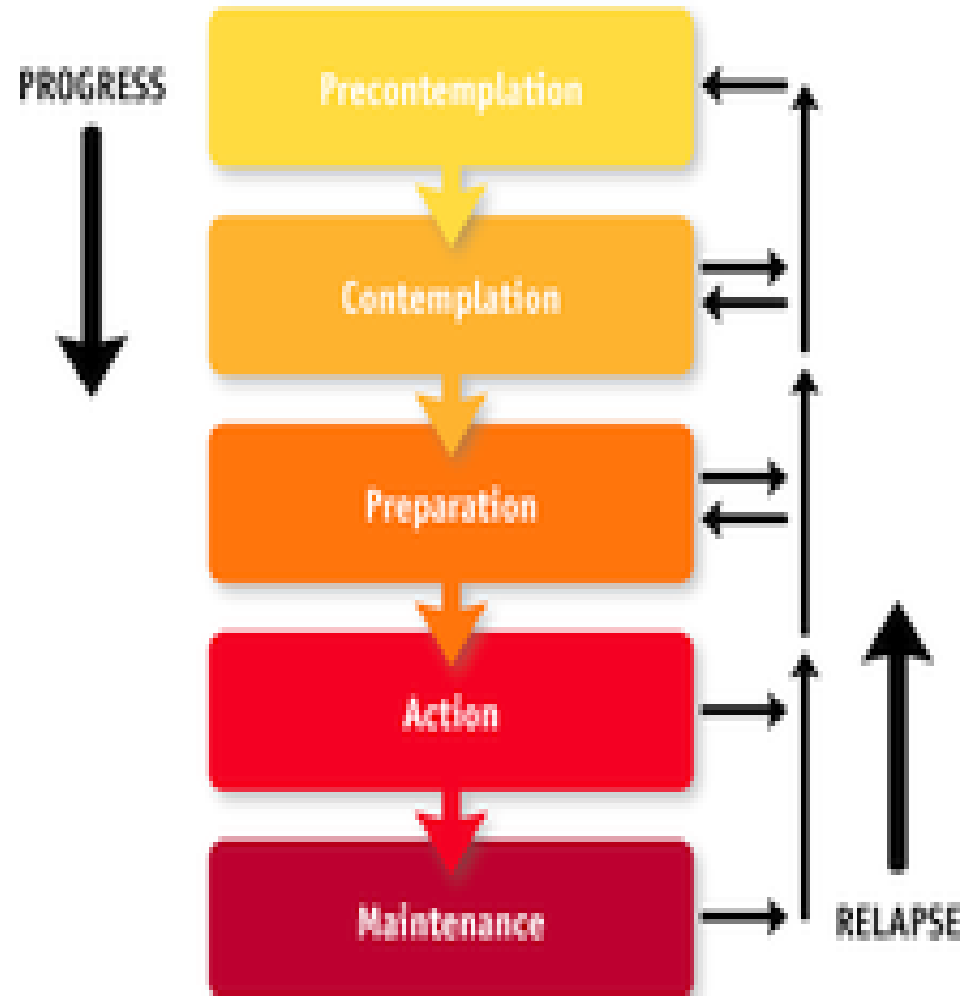
Treatment: Psychological

- Transtheoretical Model^{22.23}

- Stages of Change
- Clinical Implications

- Enhancing Exercise Adherence

- Support System
- Motivation



Evaluation: Outcome Measures

- Healthy Eating Index ²⁴
 - Updated HEI-2005
- International Physical Activity Questionnaire ²⁵
- Impact of Weight on Quality of Life- Lite ²⁶

Obesity Resources

- Physical Fitness
 - Sampson County Department of Parks and Recreation
 - SRMC Center for Health and Wellness
 - Sampson County Partners for Healthy Carolinians
- Diet
 - Registered Dietitians
 - Grocery Stores
- Support Groups
- State Programs
 - EatsmartmovemoreNC.com



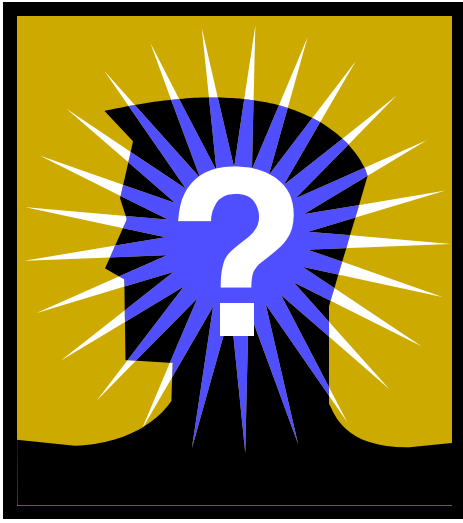
What Does This Mean for Me?

- Health Care Reform
 - Preventative Health Care
 - American Physical Therapy Association
- Physical Therapy = First Line of Defense



Booklet and Handouts

- Clinical Reference Booklet
 - Nutritional References
 - Exercise in Obese Populations
 - Outcome Measure Copies
 - Copies of Patient Handout
- Patient Handout
 - Give to patients as appropriate



Questions



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