## Take Off 4-Health" - Innovative Strategies to Improve Wellness in Adolescents Nancy Harris MS RD LDN, Alexis Briley BS, David Collier MD PhD, Yancey Crawford MPH, Carolyn Dunn PhD, Sarah Henes MA RD LDN, Stephanie Kinner BA, Kathryn Kolasa PhD RD LDN, Lesley Lutes PhD, Lee Scripture BS

## Objective

Obesity is now widely recognized as one of the most challenging public health issues in the United States. Eastern North Carolina (ENC) has particularly high rates of obesity due in part to poverty, lack of education and a large African American population which is disproportionately affected. To address obesity in ENC, a healthy lifestyle camp, Take Off 4-Health, was developed for overweight adolescents as an immersion experience to initiate small changes.

## Camp Overview

3-week residential camp for obese adolescents both male and female, ages 12-18.

## Campers participated in

$\checkmark$ Anthropometric assessments
$\checkmark$ Traditional camp physical activities such as hiking, boating, and swimming
$\checkmark$ Confidence and team building activities including a challenge course and climbing wall
$\checkmark$ Individual and group counseling
$\checkmark$ Physical therapy evaluations
$\checkmark$ Nutrition education
$\checkmark$ Family style dining

## Camper Demographics

- $\mathrm{N}=34,26$ girls \& 8 boys
- Majority African American (70\%)
- Mean age: 14.1 years
- Mean BMI pre camp: $41.9 \mathrm{~kg} / \mathrm{m}^{2}$
- Mean weight loss: 6.7 pounds or $2.5 \%$
of initial weight over 3 weeks
- Mean BMI post camp: $40.8 \mathrm{~kg} / \mathrm{m}^{2}$
nutrition Interventions


Eat Smart When
Eat Smart When
You Eat Out


## Camp Partners

- Brody School of Medicine
- East Carolina University
- University Health Systems
- Eastern 4-H Conference Center
- NC Cooperative Extension


## At Camp

## $\checkmark$ Medical Management

$\checkmark$ Individualized Diet Plan (Camper Card)
$\checkmark$ Six Hours Nutrition Education
Healthy Menu Served Family Style
$\checkmark$ Mealtime Nutrition Coaching
$\checkmark$ Behavioral Counseling
$\checkmark$ Physical Therapy
$\checkmark$ Camp Facility and Operation
$\checkmark$ Camp Activities Programming
$\checkmark$ Camp Activities Programmin
$\checkmark$ Ongoing Case Management for Campers

## Conclusions

- Camp provided education and support in a "real life" environment allowing most campers to lose weight a a safe rate.
- The menu and recipe modifications improved the nutrient value and energy density of the meals and snacks utilizing foods that were acceptable and affordable.
- Campers improved their ability to recognize good food choices and appropriate portion sizes.

