CRACKING THE CODE TO HEALTHY EATING in Greenville County Schools

Sarah Clark • Meghan Slining, PhD • Alicia Powers, PhD • Melissa Fair

BACKGROUND
In Greenville County, 61% of adults and 41% of youth are overweight or obese; one of the highest rates in the country.

Culinary Creations Initiative
Culinary Creations is a county-wide school nutrition intervention that aims to improve the school lunch environment by training school chefs to prepare meals from scratch that include more whole grains, fruits, and vegetables. The new school lunch menu, implemented in all Greenville County District schools, exceeds USDA standards.

A Partnership
Culinary Creations is a partnership between the Greenville County School District and LiveWell Greenville intended to improve the school nutritional environment and improve the health of Greenville County children.

METHODS
Sample and Population
The sample size of the study in 2014 included 13,660 students in 3rd, 4th, and 5th grade in all 51 Greenville County Elementary Schools.

DEVELOPMENT OF ANALYSIS PROTOCOL
Purpose: To create a comprehensive manual of the data analysis process that can be entered into SAS 9.2 statistical software package and perform descriptive analyses of the relationship between the Culinary Creations Intervention and body mass index in Greenville County youth.

Develop a comprehensive manual of the data analysis process, including codebook and statistical program for all analyses.

The statistical program exports result tables to Microsoft Word to facilitate reporting to individual schools.

LiveWell fellows use tables to write summary reports to 52 elementary schools in Greenville County.

Mentored and trained peers in analysis procedures. Practiced the analysis procedures on previous data with trained peers to troubleshoot problems and finalize the protocol.

School data from the 2015-2016 was analyzed with the manual and LiveWell Fellows created reports to continue the partnership with Greenville County School District through the Culinary Creations Intervention.

STRENGTHS AND SIGNIFICANCE
- Community-based participatory research
- Longitudinal design to capture changes in BMI over time
- Large sample size of 15,000 students
- Continued partnership of LiveWell Greenville and the Greenville County School District through the Culinary Creations Intervention

IMPLICATIONS AND FUTURE STEPS
- Results of weight status in schools affected how the school district distributed funds
- LiveWell Greenville will continue to measure further changes in BMI
- Training of PhD student and undergraduate student will allow the analysis to continue in years to come
- Development of analysis protocol improved data management plan and system
- Documenting and outlining steps of analysis will allow consistent evaluation of intervention in future years
- Future analysis will assess the impact of weight status on school attendance.
- LiveWell Greenville has expanded to include middle and high schools