



## Delta Obesity Prevention Research Unit— Mission Statement

The Delta Obesity Prevention Research Unit is coordinating a major research program that brings together the expertise of seven institutions in the three state region. These institutions and their research scientists provide unique skills and resources to the Delta. Their research will result in Lower Mississippi Delta specific recommendations for input into the 2015 Dietary Guidelines that will enable rural Lower Mississippi Delta individuals and families to adopt food and physical activity guidelines for sustaining healthy weights, preventing obesity, and reducing the risk factors for obesity related chronic diseases.



## Current Mississippi Personnel Supported by Delta OPRU

### The University of Southern Mississippi

Carol Connell  
Kathy Yadrick  
Holly Federico Huye  
Jamie Zoellner  
LaShaundra Crook  
Martha Resavy  
Belynda Brock  
Brihana Perryman  
Alicia Landry  
13 Part-Time Employees

### Alcorn State University

Christopher Brown  
Cinda Catchings  
Marjuyua Rowser  
Bryant Lucas  
Gwendolyn Lucas  
Corvet McNeal  
Shirley Pope  
Mattie Rasco  
Angela Stanton  
Chasity Williams  
Edith Ezekwe

## 2012 Personnel Levels Supported by Delta Obesity Prevention Research Unit

The University of Southern Mississippi - 21 Employees  
Alcorn State University - 11 Employees

**USDA, ARS, Delta OPRU**  
[www.ars.usda.gov/spa/dopru](http://www.ars.usda.gov/spa/dopru)

900 S. Shackleford Rd STE 220  
Little Rock, AR 72211

Phone: 501-954-8882  
Fax: 501-954-9596  
E-mail: [mike.grusak@ars.usda.gov](mailto:mike.grusak@ars.usda.gov)

## USDA, ARS, Delta Obesity Prevention Research Unit



## Mississippi Research Cooperators



The University of Southern Mississippi  
Hattiesburg, MS



Alcorn State University  
Alcorn State, MS

## The University of Southern Mississippi 2010-2014 Project Summary



### **Effectiveness of Women's Social Club Members Adopting Modified Dietary Guidelines**

Obesity rates in the Lower Mississippi Delta region are among the highest in the U.S., with less than 7% of Delta adults consuming a healthy diet that can reduce the risk of obesity. Evaluating the existing food patterns of Delta adults is needed. Adapting these existing patterns to meet the Dietary Guidelines for Americans will be achieved through the research conducted by the University of Southern Mississippi cooperating scientists. Minor, however effective, modifications will be made to existing dietary patterns and evaluated for successful implementation in Mississippi social women's organizations over a 12 month period. Successful results will improve the diets of dietary residents, specifically weight status and healthy blood pressure. For additional information, contact Dr. Carol Connell ([carol.connell@usm.edu](mailto:carol.connell@usm.edu)).



## The University of Southern Mississippi Significant Publications:

- **Connell, C.L., Zoellner, J.M., Yadrick, M., Chekuri, S.C., Crook, L.B.,** Bogle, M.L. 2012. Energy density, nutrient adequacy, and cost per serving can provide insight into food choices in the lower Mississippi Delta. *Journal of Nutrition Education and Behavior.* 44(2):148-153.
- Zoellner, J., You, W., **Connell, C.**, Smith-Ray, R.L., Allen, K., Tucker, K.L., Davy, B.M., Estabrooks, P. 2011. Health literacy is associated with healthy eating index scores and sugar-sweetened beverage intake: Findings from the rural lower Mississippi delta. *Journal Of The American Dietetic Association.* 111(7):1012-1020.
- Thomson, J.L., Tussing Humphreys, L.M., Onufrak, S., **Connell, C.,** Zoellner, J., Bogle, M.L., **Yadrick, K., 2011.** A simulation study of the potential effects of healthy food and beverage substitutions on diet quality and total energy intake in lower Mississippi Delta adults. *Journal of Nutrition* 2011. 141:2191-2197.
- Thomson, J.L., Tussing Humphreys, L.M., Onufrak, S.J., **Connell, C.L.,** Zoellner, J.M., Bogle, M.L., **Yadrick, K., 2011.** Simulated reductions in consumption of sugar-sweetened beverages improves diet quality in Lower Mississippi Delta adults. *Food and Nutrition Research.* 55(7304):7.
- **Downey, L., Cuy, Castellanos, D., Yadrick, K., Avis-Williams, A., Graham-Kresge, S.,** Bogle, M.L. 2010. Perceptions of Community-Based Participatory Research in the Delta Nutrition Intervention Research Initiative: An Academic Perspective. *Health Promotion Practice.* doi:10.1177/1524839909353743. <http://hpp.sagepub.com/pap.dtl>
- **Downey, L.H., Cuy Castellanos, D., Yadrick, K.,** Threadgill, P., Kennedy, B., Strickland, E., Prewitt, T.E., Bogle, M.L. 2010. Capacity building for health through community based participatory nutrition intervention research in rural communities. *Family & Community Health.* 33 (3): 175-185.
- **Zoellner, J., Bounds, W., Connell, C., Yadrick, K., Crook, L.,** 2010. Meaningful messages: Adults in the Lower Mississippi Delta provide cultural insight into strategies for promoting the My Pyramid. *Journal of Nutrition Education & Behavior.* 42:41-50.

## Alcorn State University 2010-2014 Project Summary



### **Enhancing Fruit/Vegetable Consumption of African-American Mothers and Children in Southwest Mississippi**

The prevalence of childhood obesity is of great proportions amongst rural, limited resource populations in the Lower Mississippi Delta region and particularly in Mississippi. Cooperating researchers at Alcorn State University are conducting research to reduce the current levels of obesity in these populations. Researchers will utilize a pre-/post-test design to determine the effectiveness of combining nutrition education with social support to help mothers make dietary changes. These changes will be monitored by looking for an increased consumption level of fruits and vegetables in the mother and her children (middle school age) Physical activity promotion will be provided to the children as a motivational factor to make healthier food choices. Contact Dr. Mattie Rasco ([mrasco@alcorn.edu](mailto:mrasco@alcorn.edu)) for additional information.