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 Arkansas Cooperator Personnel Supported by Delta OPRU

Arkansas Children's Hospital Research Institute

Judith Weber	Christian Lynch
Leanne Whiteside-Mansell	Christopher Hiryak
James Robbins	Andrew Carberry
Page Moore	Martha Thompson
Wendy Ward-Begnoche	Graeme Higgins
Ed Williams	Jennie Stern
Emily English	Kathrine Kuo
Rachel Schichtl	Claudia Utley

DELTA GARDEN STUDY

www.arteengarden.com

University of Arkansas at Pine Bluff

Felicia Taylor	Valerie L. Colyard
Yvonne Abbey	Jyotsna Sharman
Brenda Simmons	Flavelia Stigger
Ying H. Gao Balch	Clyde Williams
Bihu Huang	

2010 Personnel Levels Supported by Delta Obesity Prevention Research Unit

Arkansas Children's Hospital Institute - 16 Employees
University of Arkansas at Pine Bluff - 9 Employees

USDA, ARS, Delta OPRU
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USDA, ARS, Delta Obesity Prevention Research Unit

DELTA
OBESITY PREVENTION RESEARCH UNIT
USDA, AGRICULTURAL RESEARCH SERVICE

Arkansas Research Cooperators

Arkansas Children's Hospital Research Institute
Little Rock, AR

University of Arkansas at Pine Bluff
Pine Bluff, AR

Arkansas Children's Hospital Research Institute 2010-2014 Project Summary

Gardening to Reduce Obesity and Other Risk Behaviors in Delta Children

Cooperating researchers at the Arkansas Children's Hospital Research Institute are using a school gardening program designed to increase students' school bonding (connection/association) to determine if it will increase physical activity and fruit/vegetable intake. The lessons will align to the State of Arkansas frameworks for 6th -8th grade science, math, literacy and PE curriculum. A pilot study will be conducted in two schools and a larger study will involve testing the gardening program in 18 additional Delta schools to test the effectiveness of adherence to the Dietary Guidelines and reducing obesity and social risk behaviors, and improving academic achievement. Researchers anticipate that students who participate in the gardening program will be more strongly affiliated (bonded) with their school/teachers, will increase their fruit/vegetable intake and physical activity levels, and test scores and GPA's will be improved from the beginning to the completion of the program. Contact Dr. Judy Weber (weberjudithl@uams.edu) or Dr. Margaret L. Bogle (margaret.bogle@ars.usda.gov) for additional information.

Arkansas Children's Hospital Research Institute Significant Publications:

- Stuff JE, **Casey PH**, Connell CL, Champagne CM, Gossett JM, Harsha D, McCabe-Sellers B, **Robbins JM**, **Simpson PH**, **Szeto KL**, **Weber JL**, Bogle ML. Household food insecurity and obesity, chronic disease and chronic disease risk factors. *Journal of Hunger and Environmental Nutrition* 2007;1:43-62.
- Champagne CM, **Casey PH**, Connell CL, Stuff JE, Gossett JM, Harsha DW, McCabe-Sellers B, **Robbins JM**, **Simpson PM**, **Weber JL**, Bogle ML. Poverty and food intake in rural America: diet quality is lower in food insecure adults in the Mississippi Delta. *J Am Diet Assoc* 2007;107:1886-1894.
- **Casey PH**,, **Simpson PM**, **Gossett JM**, Bogle,ML, Champagne CM, Connell C, Harsha D, McCabe-Sellers BJ, **Robbins JM**, Stuff JE, **Weber JL.** The association of child and household food insecurity with childhood overweight status. *Pediatrics* 2006;118(5)1406-1413.
- **Goolsby SL**, **Casey PH.**, Stuff JE, Zaghloul S, **Weber JL**, **Gossett J**, **Simpson P**, Bogle ML. Consumption of calcium among African American adolescent girls. *Ethnicity and Disease* 2006;16:476-482.
- **Casey PH**, **Szeto KL, Robbins JM**, Stuff JE, Connell C, **Gossett JM**, **Simpson PM.** Child health related quality of life and household food security. *Archives of Pediatrics and Adolescent Medicine* 2005;159:51-56.
- Tucker K, Maras J, Zaghloul S, Champagne CM, Carithers T, **Goolsby S**, Connell, C, Bogle M, **Weber JL**. A regional food frequency questionnaire for the US Mississippi Delta. *Pub Health Nutr* 2005;8(1):87-96.
- Champagne CM, Bogle ML, McGee BB, Yadrick K, Allen HR, Kramer TR, **Simpson P**, **Gossett J**, **Weber JL.** Dietary intake in the Lower Mississippi Delta region: results from the foods of our delta study. *J Am Diet Assoc* 2004;104(2):199-207.
- **Casey PH**, **Szeto K**, Lensing S, Bogle M, **Weber JL**. Children in food-insufficient low-income families: Prevalence, health and nutrition status. *Arch Pediatr Adolesc Med* 2001;155:508-514.

University of Arkansas at Pine Bluff 2010-2014 Project Summary

Preventing Obesity of Delta Region Minority University Students

Cooperating researchers at the University of Arkansas at Pine Bluff are conducting qualitative and quantitative research that will be used to explore the dietary and physical activity patterns common to African-American college/university students in the Delta region. This will be used to develop an educational program, *Eating to Live*, which will be used to show students how to appropriately evaluate their personal diet and physical activity patterns and empower them to make lifestyle changes with the long-term goal of lifetime weight maintenance. This research will provide culturally sensitive strategies, to increase adoption of the dietary guidelines. Additional information can be obtained by contacting Dr. Felicia Taylor (taylorf@uapb.edu) or Dr. Margaret L. Bogle (margaret.bogle@ars.usda.gov)