Human

U.S. Department of Agriculture
Accomplishments Report AD-421
U.S. Dept. of Agriculture, State Agricultural Experiment Stations and Other Institutions

Date (Month, Day, Year): 03/22/2012

1. Accession	Agency Identification No.	5. Work Unit/Project No.	6. Status
0218396	2. CSREES 3. LA.B	**LAB93988**	**Annual Report**

7. Title

Changing the Health Trajectory for Older Adults through Effective Diet and Activity Modifications

12. Investigator Name(s) (Last Name and Initials)

Lammi-Keefe, C.

20. Termination Date 09/30/2014

40. Period Covered (mo/da/year): 01/01/2011 TO 12/31/2011

Outputs:

This information was shared at a national meeting and was the basis for a master student's thesis.

Outcomes/Impacts:

Women, compared to men, are at higher risk for developing age-related macular degeneration (AMD), a leading cause of blindness in the elderly. We explored if pregnancy, which is known to deplete women of docosahexaenoic acid (DHA, 22:6n-3), a long chain n-3 fatty acid found in cold water marine fish and essential to the structure and function of the eye, is a risk factor for development of AMD. In this case-controlled study, women (n=501, 50+ years of age) diagnosed with and without AMD at three private eye care facilities were recruited to participate. Participants were asked questions about their physical and retinal health, past pregnancies, family histories, and vitamin and fish oil supplementation. Evaluation of macular health was assessed by eye doctors. Significant predictors of being diagnosed with AMD were: age, parity, BMI and BMI by parity. Further, based on our data and modeling, the interaction between BMI and parity predicts that as a woman's BMI increases with the number of babies, the probability of being diagnosed with AMD is increased. Our finding that parity is a factor that predicts the likelihood of being diagnosed with age-related macular degeneration (AMD) in women should be extended to a larger population of women. Further, supplementation during pregnancy with DHA, an n-3 polyunsaturated fatty acid, may be protective against future AMD. This is the first report to implicate parity as a factor that may underlie AMD.

Publications:

Lam, N., Thibodaux, L., Durham, H., LAMMI-KEEFE, C. J. 2011. Macular Pigment Optical Density, Body Weight and Diet in College-Aged Students. 102nd American Oil Chemists Society Annual Meeting, May 1-4.

Participants:

C.J. Lammi-Keefe (PI), and H Durham, LSU AgCenter. The project was carried out by a MS graduate student. Local eye doctor offices provided the sites for patient assessments and data collection. Undergraduate students working with this research group assisted with data checking.

Target Audiences:

The target audiences for this report are the research communities studying age-related macular degeneration and maternal health. Following confirmation of these findings, reports will be communicated to health care workers who advise and treat pregnant women and women of childbearing ages.

Project Modifications:

Nothing significant to report during this reporting period.

Approved (Signature)	Title	Date
Alyp A Ekyn		3-23-12

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1. Accession	Agency Identification No.	5. Work Unit/Project No.	6. Status
0224093	2. NIFA 3. LA.B	**LAB94069**	**Annual Report**

7. Title

Coping with Natural and Technological Disasters: Human Adaptive Capacities after Hurricane Katrina and the Horizon Oil Spill

12. Investigator Name(s) (Last Name and Initials)

Garrison, M. E.; Sasser, D. D.

20. Termination Date 09/30/2014

40. Period Covered (mo/da/year): 01/01/2011 TO 12/31/2011

Outputs:

Results of the project have been disseminated in two ways this year: As co-chair of the March 2011, multi-day conference in New Orleans focused on families and disasters (see GrovesConference.org), and as co-chair of a panel discussion about disasters on November 17, 2011 at the annual conference of the National Council on Family Relations (see http://www.ncfr.org/ncfr-2011/conference-schedule/day-two).

Outcomes/Impacts:

A field presence in the Louisiana commercial fishing world has been established and research efforts are being implemented.

Publications:

No Publications Reported

Participants:

Garrison, M.E. (PI), and Sasser, D.E., LSU AgCenter.

Target Audiences:

Nothing significant to report during this reporting period.

Project Modifications:

Nothing significant to report during this reporting period.

Approved (Signature)	Title	Date
Alan H Shaw		3-23-12