



This research was to increase awareness about the health benefits of Omega-3 Fatty acids for reducing the risk of cardiovascular disease in obese individuals, especially in underserved populations and provide health professionals tools to treat cardiovascular diseases in minority population.

## Effects of Omega-3 Fatty Acids on Biomarkers of Cardiovascular Disease in Obese Individuals

### Who Cares And Why?

Obesity has become a major public health concern worldwide as well as in United States. Increased incidence of obesity could bring increased evidence of diet-related health issues such as hypertension, type 2 diabetes, cardiovascular diseases, and some cancers. Research has shown that obese individuals have an increased incidence of premature mortality as compared to their lean counterparts primarily due to obesity-related health issues like diabetes and cardiovascular diseases. Hence the objective of this research was to produce scientific/clinical information that will assist health care professionals to increase possible treatment avenues for their patients.



### What Has The Project Done So Far?

At this time, the following activities have been successfully implemented towards the progress of this project:

- Designation, training, and set up of a clinical human obesity test laboratory and exercise facility (including infrastructure, equipment, staff, etc).
- Formulation of special omega-3 fatty acids in various strengths for patient treatments.
- Patient selection and baseline physicals.



## Impact Statement

This project will primarily help with health improvement efforts for Missouri residents, especially under-served populations, and the general public in the United States. Considering the fact that treatment of cardiovascular health problems may require upwards of billions of dollars in USA alone, the proposed study is attempting to find beneficial effects of omega-3 fatty acids in prevention of cardiovascular diseases and maintaining optimal health counteracting obesity.

### What Research Is Needed?

It was determined that additional patients would need to be recruited, therefore, in the upcoming months, we will aim to recruit more patients with various BMI's and lipid profiles and investigate difference pre and post treatments.

### Want To Know More?

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Funding for this project was provided by the Evans-Allen Program within USDA's National Institute for Food and Agriculture (NIFA) at **Lincoln University of Missouri**. It addresses the NIFA priority "**Childhood Obesity**," intended to support programs that ensure and encourage prevention and treatment of obesity, in addition to providing nutrition education such that caretakers are in a position to make informed decisions regarding the health and wellness of their families and community.

Additional link can be found at <http://www.umes.edu/ard/Default.aspx?id=46285>