## Research Title: Food Waste Perceptions among College Students in University Foodservices

# Faculty Research Grant 2015 Final Report

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#### **Restatement of Problem Researched**

Food waste has been an important environmental issue in foodservice industry and the food waste issue has been highlighted in the university foodservice settings because this issue is related to college student food waste behaviors and the food waste is usually generated by food quality, food quantity, product mixes, and menu items according to previous researches. Recent and significant changes in the global economy have been shifted the food industry how to improve food cost management related to food waste. Even though there are abundant previous researches revealing solutions of food waste for college and university but there are limited researches about college students' perceptions about food waste. Therefore, the purpose of this research project was to find out college students' food waste perceptions related to cafeteria menu items in college and university dining operations.

#### **Brief Review of the Research Procedure Utilized**

I, as a researcher, developed survey questionnaire based on previous food waste researches and literature reviews. The survey questionnaire was focused on demographic information about college students, characteristics of foodservice operations, and factors of food waste. A Likert-five point scale ranged from (strongly Disagree) to 5 (Strongly Agree) was used to measure college students' perceptions and attitudes on food waste. A pilot study was conducted with a convenience sample of 40 college students who were using university cafeteria. This study was reviewed and approved by the Institutional Review Board (IRB) at Arkansas Tech University prior to commencing research activities. A total of 306 questionnaires were collected from Arkansas Tech University, University of Arkansas, Arkansas Baptist College, and Arkansas State University.

### **Summary of Findings**

More than half (n=177, 57.8%) were females. Caucasian-non-Hispanic (n=189, 61.8%) was the prominent ethnic group and more than half of the respondents (n=206,

67.3%) were freshmen and sophomores in the universities. Most respondents (n=285, 92.1%) ranged in age between 18 and 23 years. Results indicated that a lot of respondents have been educated to reduce food waste before and believed that trayless dining service is helpful to reduce food waste. Also, this research results showed that there are relationships among food waste, food quality, and menu options and respondents indicated that skilled employees may produce a better quality of food and contribute to reduce food waste. Males and females showed differences on food waste perceptions. Females showed higher scores on food waste. All sub scales of food waste showed a positive correlation with food quality and menu options. These results revealed that how these are correlated each other and as college students perceived that better food quality and menu option are important factors, these are key factors to reduce food waste in university dining settings.

#### **Conclusions and Recommendations**

This study demonstrated that how college students perceived food waste in university dining services. Results indicated that there are relationships college students' satisfactions, food quality, and menu options. The results showed that small service size, better food options, better food quality and value of meal plan are main factors of food waste. This research was focused on college students' perception of food waste in university dining operations. A future study should consider different samples in casual and fine dining restaurants. For future research, the research may conduct group interviews in diverse universities to further explore food waste perceptions among college students and how university dining service managers can effectively reduce food waste related to menu options and food quality.