Hunger Relief Programs:
Improving Food Access

The food bank network in the United States plays a key role in meeting food needs of persons who are food insecure, but how do we improve the efficiency of the hunger relief programs and address their nutritional content? This Invited Paper Session at the AAEA Meetings will review ongoing research and emphasize the future research needs of the food banks and their agencies to accomplish these objectives. The session is co-sponsored by the Food Safety and Nutrition Section and the Senior Section.

Feeding America (FA) is the largest hunger relief provider in the United States with 200 food banks, the organizations that collect and distribute food to their agencies. These agencies support 58,000 feeding programs providing food assistance to 46.5 million people including 12 million children and 7 million seniors (Hunger in America Report 2014). Moreover, many of these households are facing significant diet-related health challenges. For example, 1 in 3 households have someone with diabetes and 58% report someone with hypertension (Hunger in America Report 2014).

Although distributing healthy food is a primary goal for food banks and their agencies, they face many challenges in meeting this goal. Budgets for purchasing food are always limited, and hunger relief agencies often have little influence over the nutritional quality of food they receive through donations.

The presentation of ongoing research in this area illustrates the potential for more work. (1) The first paper is an overview of food banking and will illustrate the application of behavioral economics to the challenge of improving the nutrition of program beneficiaries at food pantries. (2) Another two year-long study calculates monthly Healthy Eating Index (HEI) scores using electronic invoice data for 273 food pantries served by two major food banks in Minnesota. This involved capturing transaction data in electronic form and mapping the food items in the regular inventory to the FNDDS database. However, more than 30 percent by weight of the food moving through food banks to food pantries is free "miscellaneous" food donated by food stores and food distributors and is not part of the regular food bank inventory. This required the development of another method for characterizing the healthfulness of the food distributed. (3) An analytical model developed in New York helps food banks improve their gleaning operations, particularly for fruits and vegetables. In the model, gleaning opportunities arrive randomly to the food bank, and are processed with stochastic processing times that depend on the location of the farm, the volume of the harvest, and the availability of labor for gleaning. Consequently, the capacity levels and operating policies that maximize service level for a given operating budget can be determined.

This session offers valuable insights on the nutritional quality of hunger relief food and provides three examples of research studies to evaluate and improve the operations of this important segment of our food system. Don't miss this opportunity to learn about the applied research opportunities related to this high-priority societal need. Join us Monday, July 27, at 1:00 PM in Salon 1 of the Marriott Marquis.