



## Dike O. Ukuku

U.S. Department of Agriculture, USA

### Produce safety and quality research at ERRC

There are many reports of disease due to consumption of fruits and vegetables that were contaminated on the surface with enteric pathogens. Therefore, the safety of fresh-cut melons and other produce available in salad-bar operations and supermarkets is a concern. Physical and chemical treatments are used in food processing to eliminate, or at least reduce, the population of pathogenic and spoilage microorganisms. Also, several nonthermal technologies for food processing have been developed and commercialized, including ultraviolet processing of apple cider and radio frequency processing of orange juice. The objective here is to summarize some of the work on produce safety and quality research done at Eastern Regional Research Center using our own in house processing technologies. The efficacy of these technologies on bacterial inactivation on produce will be elucidated and processing techniques that can achieve up to 5 log reduction of bacteria were recommended.

#### Biography

Dike O' Ukuku got his Ph.D. Food Microbiology from Wayne State University, Detroit, Michigan, 1995. He is a Fellow of King-Chaves-Parks Future Faculty, 1993, and a Fellow of Japan Society for Promotion of Science, 2006. He was invited to the Membership of Science Advisory Board, 2009-present, a Gold Medalist, for Outstanding public Service 2009, USDA-OPEDA Unsung Hero Award, 2010, Outstanding Technical Achievement for Food Safety, 2012 Award. Has authored or coauthored more than 60 publications. He is on editorial board membership of three scientific journals, has numerous invitations to act as an in depth subject matter expert for manuscripts submitted to scientific journals, as well as Grant programs including USDA's SBIR phase 1, BARD and 1890 Institutions.

dike.ukuku@ars.usda.gov