

## **INSTITUTE OF CHILD NUTRITION APPLIED RESEARCH DIVISION RESEARCH UPDATE**

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The Institute of Child Nutrition, Applied Research Division (ICN ARD), located at The University of Southern Mississippi, with headquarters at The University of Mississippi, conducts research to promote continuous improvements of child nutrition (CN) programs. Funding for the ICN is provided through a grant administered by the United States Department of Agriculture (USDA), Food and Nutrition Services (FNS). The research summaries presented in this update represent the most recently completed projects for ICN ARD. A full report of each research project can be found at <https://theicn.org/research>.

### **RECENTLY COMPLETED RESEARCH**

#### **PHASE II, COVID-19 TASKFORCE STUDY**

As the novel coronavirus of 2019 (COVID-19) continued to create problems beyond the initial stages, researchers at ARD identified the continued unexpected operational challenges school nutrition (SN) professionals would face in year two of the pandemic. Concerns about potential supply chain issues and financial burdens surfaced as School Nutrition Programs (SNPs) prepared for school year 2021–2022. Therefore, the researchers at ARD built on previous COVID-19 research to explore the challenges and realities faced by SN professionals supporting and serving meals through another transitioning period of the COVID 19 pandemic. The research objectives for Phase II, COVID-19 Taskforce Study were to: (a) identify and describe the major operational changes/strategies that SNP operators are supporting for the re-opening of schools for in person instruction and/or remote learning, and to promote access to school meals, (b) assess the training, technical assistance, and resource needs of State agencies and school food authorities as SNPs develop plans for SY 21–22 program operations, and (c) identify emerging trends, or future implications, that will impact SNP meal service and/or future training and technical assistance requirements.

To accomplish these research objectives, focus groups were conducted with SN professionals (n=23), State agency directors (n=19), purchasing consortiums (n=7), and industry professionals (n=26). Focus groups included participants across all seven USDA regions and various National Center for Education Statistics urban-central locale categories (i.e., city [small, medium, large], suburb [small, medium, large], town [fringe, distant, remote], and rural [fringe, distant, remote]). Each focus group lasted 60–90 minutes and was conducted remotely using the Zoom virtual platform.

Findings from this study indicated that: (a) SNP participants had experienced significant challenges providing meal delivery and service during Fall 2021; (b) industry participants transitioned during COVID-19 to become more proactive in forecasting, improved planning and preparation, stockpiled inventory, and used a variety of strategies (such as product allocation) to ensure that SNPs received products and services; (c) both SNP and industry participants

identified an increased sense of resiliency, uncertainty of the future, and the need to keep improving the SNP-industry relationship; and (d) all participants noted that supply chain and procurement issues have been one of the major challenges and requested training and technical assistance to help them address the issues. At present, the research report is being finalized. Findings from this research study will be available in early fall on the ICN website.

### **COMPETENCIES, KNOWLEDGE, AND SKILLS OF EFFECTIVE SCHOOL NUTRITION ASSISTANTS/TECHNICIANS**

The Competencies, Knowledge, and Skills (CKS) series is the ICN ARD's signature research-based resource for CN professionals. The CKS resources identify necessary competencies, knowledge, and skills needed by professionals at all levels employed in CN programs to perform their job functions effectively. This latest resource, Competencies, Knowledge, and Skills of Effective School Nutrition Assistants and Technicians, aimed to update the previous CKS on the topic for the current SN environment. The research objectives were to: (a) confirm the functional areas that encompass the responsibilities of SN assistants/technicians, (b) confirm the CKS for each functional area, (c) determine the current training needs of SN assistants/technicians, and (d) develop a CKS resource for SN assistants/technicians.

To accomplish the research objectives, the researcher used a multi-phased research approach. In Phase I, the researcher completed site visits (n=4 school districts) and an electronic Delphi panel (n=14). In Phase II of the project, the researcher utilized a face-to-face expert work group (n=17) of SN professionals to develop CKS statements. For the final phase, Phase III, an electronic review panel (n=5) was used to validate the Phase II findings, a face-to-face expert work group (n=7) was conducted to develop the CKS resource, and a review panel (n=10) was convened to review the completed CKS resource.

The findings of this research can support the ICN, the USDA, State agencies, and training professionals in developing additional appropriate professional development resources and training materials for SN assistants/technicians. Additionally, the CKS research and resource can provide the structure for competency-based training, performance appraisal, and mentoring based on the identified competencies and functional areas. Links for electronic tools for the CKS resource, job descriptions, interviews, mentoring, and performance appraisals can be found on the ICN website at <https://theicn.org/research>.

### **EVALUATION OF ICN TRAINING PROGRAM: NUTRITION 101 (ONLINE AND FACE-TO-FACE MODES)**

The ICN provides various educational methods to meet the needs of CN program professionals, including synchronous and asynchronous learning opportunities. The Nutrition 101: A Taste of Food and Fitness (Nutrition 101) course is one of the most popular courses at the ICN and is available through the ICN's face-to-face, virtual, and online options. Due to the popularity of Nutrition 101, and the recent updates made to Nutrition 101 (to comply with the final rules published on March 2, 2015, for Professional Standards for School Nutrition Professionals), ICN thought it would be prudent to evaluate the effectiveness of the course.

The objectives of this project were to assess: (a) professional reaction to the training (or participant satisfaction), (b) professional learning, including increases in knowledge and skills

related to the topic area and changes in attitudes about the topic area, (c) changes in behavior related to climate for change at work and the possibility of rewards associated with change at work, and (d) results, including the final outcome associated with participating in the training. To accomplish the research objectives, a multi-phased research approach was used. In Phase I, the researchers utilized an expert panel of ICN staff and consultants to review and validate the study's survey instruments. The instruments were piloted. In Phase II of the project, the final version of the study's instruments was administered to consenting participants. All participants in the study completed a pretest/posttest, course evaluation, six-month evaluation survey, and 12-month evaluation survey.

Some of the key findings in this study include: (a) participants rated Nutrition 101 at a 4 or higher for satisfaction and overall impressions on a 5-point Likert-type rating scale; (b) at the six-month mark, more than half of the participants reported that they had the opportunity to apply knowledge gained from the course to personal and professional environments and accomplish their personal or professional goals; and (c) at the 12-month mark, almost all participants had applied knowledge gained from the course in personal and professional settings and over half had earned the School Nutrition Association Level 1 certification in SN. In general, this research indicates that the Nutrition 101 online course was well-received by all participants and met its primary goals—to increase knowledge regarding essential nutrition and support attainment of The School Nutrition Association's Level 1 certification. Additional information about this study can be found on the ICN website at <https://theicn.org/research>.

## **BIOGRAPHY**

Dr. Marjuyua Lartey is currently Interim Director of the Institute of Child Nutrition, Applied Research Division at the University of Southern Mississippi. She completed a PhD. in Nutrition and Food Systems at the University of Southern Mississippi as well as her Master's Degree in Human Nutrition and dietetic internship to become an R.D. at the same university.

Dr. Lartey's career encompasses nearly 25 years of teaching, research, and practice in the field of nutrition and dietetics. Most recently, she has spent 12 years conducting research related to youth and Child Nutrition Programs. In addition to research, Dr. Lartey experiences include working on the collegiate level as an instructor and assistant professor as well as serving as a clinical dietitian in a hospital setting.