P89 (continued)

Objective: This study takes an in-depth look at operational barriers within Dining Facility (DFAC) in order to guide future interventions.

Study Design, Setting, Participants, Intervention: Three iterations of anonymous DFAC staff focus groups were conducted four months apart at two separate facilities ($n = 66, 79$ and 71 , respectively per iteration; 18% supervisors). Each session was led by a registered dietitian and audio-recorded then transcribed and reviewed twice for validity. Common themes were coded and analyzed using NVIVO 11 software.

Results: Although each DFAC possessed unique barriers to program success, the most common barrier was low DFAC staff morale (201 references over 97% of sessions) related to high workloads, poor communication and long work hours. Program non-compliance barriers were also connected to three themes: management standards (158 references over 94% of sessions) related to internal and external DFAC operating procedures that interfere with resource optimization and recipe compliance; insufficient culinary skills training (124 references over 89% of sessions) reflective of menu and recipe adaptation of new foods; and nutrition knowledge (78 references over 74% of sessions) relevant to a lack of understanding behind reasons for the intervention and how to maintain compliance of the nutritional standards.

Conclusions and Implications: The findings of this study support that attention to the needs of the culinary staff with adequate communication of rationale behind DFAC changes will improve diet quality and patron dining satisfaction. Specific recommendations are to provide culinary staff: classes in basic nutrition knowledge and culinary skills; continuous on-the-job training; resource management training and new production SOPs specifically adapted for the intervention.

Funding: Department of Defense.

P90 Wellness in the Schools (WITS): Evaluating a Program that Promotes Healthy School Lunch and Active Recess

Pamela Koch, EdD, RD, pak14@tc.columbia.edu, Department of Health and Behavior Studies, Teachers College, Columbia University, 525 W 120th Street, Box 137, New York, NY 10027; Raynika Trent, MA, EdM; Randi Wolf, PhD, MPH; Heewon Lee Gray, PhD, RDN, University of South Florida, Department of Community and Family Health, College of Public Health; Ian Ang, PhD, National University Health System, Singapore; Priya Khorana, EdD, Department of Health and Behavior Studies, Teachers College, Columbia University; Matthew Dallefeld, MS, RDN; Elizabeth Tipton, PhD; Isobel Contento, PhD, CDN

Background (Background, Rationale, Prior Research, and/or Theory): A positive school lunch and recess experience promotes healthy behaviors.

Objective: To evaluate the two-year impact of WITS programming on school lunch consumption, physical activity levels, and pro-social behaviors at recess.

Study Design, Setting, Participants, Intervention: Quasi-experimental, matched-control study in 14 NYC public elementary schools with second and third graders. WITS programming provides scratch-cooked, less processed school lunch and organized activities at recess by placing trained chefs and coaches in the school.

Outcome Measures and Analysis: School lunch consumption, as well as physical activity and pro-social behaviors at outdoor and indoor recess, were measured using standardized tools and protocols. Data were collected at three time points (no baseline): Time 0 (early intervention), Time 1 (one school year post intervention) and Time 2 (two school years post intervention) and compared using Repeated Measures Analysis of Variance.

Results: For school lunch consumption, there were early intervention effects. Students in the WITS schools ate more vegetables and fruit at Time 0 than students in control schools (.27 cups vs. .18 cups, $P < .05$), with the same differences found at Time 1 and Time 2. However, students in WITS schools ate less entrée (42% of portion versus 46%, $P < .05$) and drank less milk (29% of portion versus 38%, $P < .05$) at Time 0, with these differences also remaining through Time 2. Outdoor recess had no difference in physical activity levels. Indoor recess had a higher percentage of WITS students vigorously active (46% vs. 3% at Time 1, $P < .05$; 29% vs. 4% at Time 2, $P < .05$; and was not measured at Time 0). Pro-social behavior scores were higher in WITS schools at all time points for outdoor and indoor recess ($P < .05$).

Conclusions and Implications: WITS programming changed school lunch consumption with both positive and negative results. WITS is a promising school-wide intervention. Further research is needed to better understand how students could eat more of all school lunch components and how to get students more physically active during outdoor recess.

Funding: Wellness in the Schools.

P91 What Helps Community Food Pantries Make Changes? The Safe and Healthy Food Pantry Project: A Socio-Ecological Model to Addressing Facilitators and Barriers in the Food Pantry Environment

Jennifer Park-Mroch, PhD, jennifer.parkmroch@ces.uwex.edu, University of Wisconsin-Extension, 432 N Lake Street; RM 337, Madison, WI 53706; Amber Canto, MPH, RDN; Barbara Ingham, PhD, University of Wisconsin, Madison

Objective: This presentation describes the facilitators and barriers to making healthy and safe changes in community food pantries using the Safe and Healthy Food Pantry Project (SHFPP) toolkit.

Continued on page S51