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Objective: We explored quality of implementation during a pilot evaluation in spring 2017, using a multi-prong approach: principles-based fidelity, attendance, and participant reaction: interest, relevance, comfort level, and satisfaction.

Description: We conducted live observation of a subset of sessions with a check-list of “core concepts”. Facilitators answered questions regarding participant engagement and understanding of concepts presented. Participants completed a session evaluation that assessed understanding of core concepts presented (knowledge), and facilitator rapport. We aimed to assess adherence but also other site-specific nuances associated with learning and key outcomes.

Evaluation: Of the 13 participating families (fathers), most attended six sessions. In total, parents completed 109 after-session (one-page) evaluation forms. Most (90%) indicated class sessions were somewhat or very useful, somewhat or very interesting, and that participants felt comfortable sharing opinions. Most (94%) of their responses rated facilitators as supportive and as having addressed participants’ needs and interests.

Conclusions and Implications: This process evaluation findings illustrate quality implementation assessment. Overall facilitators had high levels of facilitation skills. The principle-based fidelity addressed the necessity, not only to capture adherence, but also whether the program has been able to achieve the desired results. It also provided insight to implementation that allows for adaptability to “real life” situations without loss of effectiveness. However, it called for a highly-skilled evaluator and developing the indicators of that can be broadly used in community settings.

Funding: USDA.

P170 Exploring the Use of Online Learning in Postsecondary Nutrition Education Courses: A Systematic Review

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Background (Background, Rationale, Prior Research, and/or Theory): The internet and new information technologies have transformed education. Nutrition education is among many postsecondary subjects being taught using online instructional methods. With increasing demand for flexible coursework to prepare nutrition professionals, educators will benefit from a synthesis of what is known about effective online learning for nutrition education courses.

Objective: To investigate the current use of online instruction in undergraduate and graduate nutrition courses,

determine course effectiveness, and identify practical recommendations for educators.

Study Design, Setting, Participants, Intervention: We systematically reviewed studies via a comprehensive search of major databases using a standardized search strategy. Studies selected for inclusion were those that evaluated the knowledge and/or perceptions of undergraduate or graduate students in postsecondary nutrition education courses delivered completely or primarily online. We considered both experimental and epidemiological study designs.

Outcome Measures and Analysis: We extracted data on course instructional design, study design, participants, and outcomes from the studies meeting our inclusion criteria. Four reviewers independently assessed study quality using the Nutrition Evidence Library Bias Elimination Tool.

Results: Nineteen of 5,803 search results met the inclusion criteria. Most involved asynchronous online courses in health professional studies (e.g. dietetics, nursing, medicine). Few studies employed an experimental design and many lacked details regarding the course’s instructional design. Among studies with a comparison group (n = 7), there were no differences in nutrition knowledge between online and face-to-face learners. Results were inconclusive regarding students’ perceptions.

Conclusions and Implications: Current reports suggest that neither online nor face-to-face nutrition courses are superior and students’ experiences with online learning vary. Recommendations for educators include being engaged with the online class during discussions, providing regular feedback, becoming comfortable with different technologies, and developing course content that facilitates discovery learning. The heterogeneous methods and limited descriptions of instructional design we identified highlight the need for research that elucidates effective approaches to online learning in postsecondary nutrition education courses.

Funding: None.

P171 Field Testing of Complementary Feeding and Nutrition Education Intervention in Selected Philippine Villages

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Background (Background, Rationale, Prior Research, and/or Theory): In response to the problem of malnutrition in the Philippine countryside, the Department of Science and Technology, through the Food and Nutrition Research Institute (DOST-FNRI), developed a package of interventions which combines complementary feeding of young children and nutrition education of mothers and caregivers.

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Objective: The project aimed to reduce the prevalence of underweight among young children and improve the nutrition knowledge of mothers and caregivers.

Study Design, Setting, Participants, Intervention:

A quasi-experimental design was used in this study among young children and their mothers or caregivers in selected villages in the Philippines with high prevalence of malnutrition among children aged 0–5 years old. The intervention group children were fed daily for 120 days with rice-mongo based complementary foods rich in energy and protein while their mothers/caregivers participated in nutrition education sessions. The non-intervention group received the regular services in the locality.

Outcome Measures and Analysis: Anthropometric measurements were taken using calibrated weighing scale. Face-to-face interview using pre-tested questionnaires was utilized to obtain the profile of program participants and knowledge of mothers/caregivers on health and nutrition. Energy and protein intakes of children using 24-hour food recall were recorded. Data were collected before and after the intervention.

Results: The prevalence of underweight children decreased significantly in the intervention compared to the non-intervention group. Energy and protein intakes among children, as well as the mean scores on nutrition knowledge among mothers/caregivers increased significantly at baseline in the intervention group. The complementary feeding component of the intervention proved effective in improving the nutritional status of children and the nutrition education component increased mean scores of mothers/caregivers on health and nutrition knowledge.

Conclusions and Implications: The combined intervention of complementary feeding of children and nutrition education of mothers provided policy directions for local government units to adopt the intervention as a component of the local health and nutrition services.

Funding: Department of Science and Technology—GIA.

P172 Food Appeal and Taste Perceptions Differ by School Lunch Participation During a Chef-Based Intervention

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Background (Background, Rationale, Prior Research, and/or Theory): Chef-based training programs addressing culinary skills of school nutrition professionals are a growing trend. Studies of these interventions reflect better compliance with the 2012 USDA school meal regulations; less is known if they influence satisfaction of school meals among students, parents and faculty.

Objective: Investigate if a chef-based intervention, Cooking for Kids, influenced stakeholder groups' satisfaction with the lunch program. The study was conducted in 17 school districts that participated in the 9-month program. The pre/

post survey was based on the satisfaction scale developed by the Child Nutrition Institute, and included a question assessing frequency of participation and allowed for open-ended comments.

Outcome Measures and Analysis: Scale items and overall satisfaction were compared using a 2x3 analysis of variance for time and frequency of participation. Comments were coded by theme; frequency analysis was used to identify common themes. Chi-square was used to determine if the proportion of negative versus positive survey comments changed over time.

Results: The number of stakeholders that completed the survey were 3,820 students, 660 parents, and 364 faculty. For each stakeholder group, regardless of participation frequency, there were no changes in overall satisfaction from pre- to post- intervention. Across all groups, stakeholders who always participated reported higher overall satisfaction compared to those who sometimes or never participated ($P < .001$). Faculty had a significant shift in the proportion of negative to positive comments ($P = .004$). The prevalent themes were related to taste and appeal of the food.

Conclusions and Implications: Stakeholders who participate in the school lunch program are likely to be satisfied with the meals, compared to those who never participate. Appeal and taste tend to drive satisfaction. Soliciting input for school menus and introducing new foods with taste testings, among both participants and non-participants, may help increase stakeholders' satisfaction.

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P173 How Students View Food Security: Results From Cognitive Interviews With Undergraduates at a Land-Grant University

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Background (Background, Rationale, Prior Research, and/or Theory): In the U.S., food insecurity (FI) affects one in eight households, putting individuals at greater risks for compromised mental and physical well-being. Recent evidence suggests that post-secondary (i.e. college) students are at an increased risk of FI. However, little is known about how students interpret established FI questionnaire items.

Objective: The current study aims to understand how students think about FI questionnaire items and compare their response choices to their experiences.

Study Design, Setting, Participants, Intervention: Thirty-three undergraduate students, aged 18- to 24-years old and fluent in English were recruited. Students completed the 10-item USDA Adult Food Security Survey Module (AFSSM) in-person, and then were cognitively interviewed to understand how they

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