P54 iCook 4-H: 0 to 24-Month Accelerometer-Derived Physical Activity and Sedentary Time in Youth

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Objective: To assess accelerometer-derived physical activity (PA) and sedentary time (ST) from 0 to 24-months in iCook 4-H youth.

Design, Setting, Participants, and Intervention: iCook 4-H was a 5-state, randomized control-treatment family-based childhood obesity prevention intervention promoting cooking, eating and playing together. Youth, 9-10 years old, and their main meal preparer participated in the 14-week program followed by monthly newsletters and bi-yearly booster sessions until 24-months. PA and ST were determined for 124 (Intervention=88; Control=36) youth.

Outcome Measures and Analysis: Youth wore an Actigraph GT3X+ accelerometer for 7 days at 0, 4, 12, and 24-months. Mean daily minutes of ST, light PA (LPA), moderate PA (MPA), vigorous PA (VPA) and moderate-to-vigorous PA (MVPA) were evaluated during waking hours. Between and within group differences from 0 to 24 months were determined using linear mixed models (R, 3.2.3, Vienna, Austria, 2015); $p \leq 0.05$.

Results: There were no between group differences in PA or ST at any time-point. PA at all intensity levels decreased and ST increased for both groups from 0 to 24-months ($p \leq 0.001$). The percent of participants meeting the PA guidelines (60 minutes of MVPA per day) decreased from 0 (60.8% intervention, 84.5% control) to 24-months (16% intervention, 0% control).

Conclusion and Implications: iCook 4-H was a multi-component program following 9-10 year old youth for 24-months that focused on cooking skills, mealtime behavior and conversation, and enhancing PA through daily activities. Greater emphasis on developing PA skills, changing environmental factors, and increasing PA both in and after school may be needed to prevent the decrease in PA that occurs as children age into adolescence.

Funding: USDA

P55 Efficacies of Color Your Plate Nutrition Education Curriculum in Senior Center Congregate Meal Sites

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Objective: Nutrition education classes at senior centers have the opportunity to be an effective tool to increase

fruit and vegetable intake in older adults. The Color Your Plate nutrition education program was developed to help older adults overcome perceived barriers to fruits and vegetable consumption and increase motivation to eat recommended amounts of fruits and vegetables.

Design, Setting, and Participants: Older adults regularly attending congregate meals at four senior centers were recruited to participate in this study. At two experimental sites, seniors engaged in a five-session nutrition education program offered biweekly at the senior center based off the University of Georgia Live Well Curriculum. Control participants received print nutrition education materials, but no classes.

Outcome Measures and Analysis: All participants were interviewed by trained study personnel pre-nutrition education, immediately at the end of the program, and at 2 and 4 months post-intervention.

Results: Sixty-five seniors (18.5% males, 81.5% females) ages 75.6 ± 8.0 years participated. For those seniors engaged in nutrition education classes, there was a significant increase in motivation to consume more fruits and vegetables post-intervention versus pre-intervention ($p=0.003$). The main barriers to fruit and vegetable consumption were lack of availability when not in season (67.2%), dislike for the taste (42.2%), and lack of adequate storage space (31.1%). The nutrition education program did not have a significant impact on decreasing barriers to fruit and vegetable consumption.

Conclusions and Implications: The five-lesson Color Your Plate nutrition education program increased motivation of older adults to consume more fruits and vegetables. In the future, the program could greater emphasize strategies to overcoming barriers to fruit and vegetable consumption.

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P56 Perspectives Toward Partnering With Faith Organizations for Health Programming

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Objective: To explore the perspectives, capacity, and readiness of Supplemental Nutrition Assistance Program Education (SNAP-Ed) Extension Agents from Virginia Cooperative Extension (VCE) in partnering with faith-based organizations (FBO) to deliver nutrition-education health programming.

Design, Setting, and Participants: A mixed-methods study with online surveys and individual telephone interviews with current and former VCE SNAP-Ed Agents ($n=10$) was conducted to explore Agents' previous experiences and future interest towards partnering and working with FBOs.

Outcome Measures and Analysis: Outcomes included agent's previous experience(s), current opportunities, future interest working with FBOs, barriers and facilitators

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with FBO partnerships, personal affiliations, level of involvement, and attitudes toward religion and faith. Agents' readiness, comfort engaging with FBOs, and interest in pursuing a faith-based nutrition and physical activity program were also assessed. Interviews were audio-recorded and transcribed. A thematic analysis approach was used to analyze and report patterns and themes within the data according to community-based participatory research constructs.

Results: Factors most important to agents when partnering with FBOs included compatible climate, sense of shared values and principles, and effective partner leadership. Concerns were raised about lack of awareness of religious beliefs, particularly among respondents who do not identify with a religious sector. Strategies to develop and strengthen partnerships between Agents and FBOs in their community were identified, including working alongside health ministries of FBOs, participating on a community coalition where FBO leaders are active, and providing FBO partners with up-to-date nutrition-related resources tailored to their desires and needs.

Conclusions and Implications: The results highlight challenges and opportunities for building SNAP-Ed and FBO partnerships for health interventions.

Funding: None

P57 Schools as Hubs of Health: A Case Study on Comprehensive Nutrition Education Program Delivery

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Objective: To pilot a comprehensive nutrition education and obesity prevention program delivery model at one school site over a four month intervention period.

Target Audience: Low-income elementary school students, school staff, parents, and collaborating community organizations.

Theory, Prior Research, Rationale: Research consistently shows that implementing changes across multiple levels of the Social-Ecological Model (SEM) can improve eating and physical activity behaviors. To build a comprehensive obesity prevention service delivery model this program targeted multiple levels of the SEM through environmental changes; youth development; and inquiry-based, learner centered and experiential nutrition education curricula.

Description: During the 2014-15 academic year, UC Cal-Fresh piloted a comprehensive nutrition education program, based on the socio-ecological model, at a school site in Santa Maria, CA. This included interventions in staff training, classroom education, lunchroom environment, garden-based education, parent education, food demonstrations, youth engagement, and school-wide events.

Evaluation: Evaluation included pre and post nutrition knowledge surveys and anthropometrics, tracking and retrospective observation of student nutrition and physical

activity behaviors, school environment assessments, fidelity observations, and a partnership assessment survey. Results revealed numerous successes, including significant gains in student nutrition knowledge and behaviors, positive changes to school environments, and positive developments in community partnerships, as well as opportunities to improve future programming.

Conclusions and Implications: Overall, moving to a comprehensive model resulted in positive changes in students, staff, and community partnerships. Future interventions should include a greater emphasis on physical activity, support for teachers in the garden, parent involvement, and a longer intervention period.

Funding: USDA, California Department of Social Services (CDSS) CalFresh Branch, University of California Cooperative Extension (UCCE)

P58 Food Safety Knowledge and Psychosocial Indicators in Relation to Garden and Personal Behaviors in Early Childcare Educators

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Objective: Early childcare (ECC) educators play an important role in reducing foodborne illness risks in children who participate in farm-to-preschool programs (F2P). To inform F2P development, the purpose of this project was to determine food safety (FS) knowledge and behaviors of ECC educators, and to examine knowledge and FS attitudes modeled on social cognitive theory (SCT) in relation to FS behaviors.

Design, Setting, and Participants: Online and paper surveys were sent to a random sample of 600 ECC centers in MA and NH, with oversampling of CACFP participants. Farm and garden and FS-related knowledge, psychosocial attitudes, and practices were assessed using a 47-item survey.

Outcome Measures and Analysis: A FS knowledge score was created by summing correct responses to five knowledge questions. Personal FS and garden-related behavior scores were created by summing the values for six and four questions, respectively. Psychosocial factors were grouped based on constructs of SCT. Psychosocial indicators and FS knowledge scores were related to behavior scores using linear regression and Pearson's correlation coefficient where appropriate.

Results: Educators' (n=118) FS knowledge was moderate, and was associated with personal FS behaviors (p=0.0003) but not garden-related behaviors. Self-efficacy and self-regulation tended to be associated with garden-related behaviors. Observational learning (p=0.001) and an overall psychosocial score (p=0.05) were associated with garden-related behaviors.

Conclusions and Implications: Following recommended FS practices is an essential part of farm-to-preschool programs. Findings indicate that a F2P training program

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