P27 (continued)

This information will be useful in assessing current needs and deficiencies, as well as food purchasing behaviors among high school students in California. Additionally, it provides insightful information for teachers regarding nutrition knowledge gain and behavior change of their students.

Conclusions and Implications: Many factors influence teen buying and decision-making that have an effect on health. "Hunger Attack!" was designed to provide teens with the skills and knowledge to make healthier choices. The "Hunger Attack!" nutrition education curriculum addresses the connection between food insecurity and an increased risk of obesity.

Funding: None

P28 Sports or Nutrition? Playing High School Sports Most Strongly Relates to Fewer Doctor Visits After Age 75

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Objective: What determines how often a healthy 25 year-old will visit their doctor 50 years later? This could have powerful implications for targeting health interventions.

Outcome, Measures and Analysis: A unique data set was collected of 712 healthy United States males who passed a rigorous physical exam in the 1940s and who were surveyed 50 years later (in 2000). Regressions involving measures of nutrition and physical activity as a youth were regressed upon doctor visits after age 75.

Results: In contrast to hypotheses about early nutrition, among this population, the single strongest predictor of self-reported doctor visits (and later-life physical activity) was whether he played a varsity sport in high school.

Conclusions and Implications: Encouraging systematic or frequent physical activity at a young age - whether through school sports or club opportunities - might be the best investment in long-term activeness. This is relevant at a time when funding for many sports programs is being eliminated and play time is being replaced with screen time.

Funding: None

P29 Withdrawn

P30 What Predicts Whether a Child Will Be at Risk for Obesity?

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Objective: What predicts whether a child will be at risk for obesity? Whereas past research has focused on foods and eating habits, this study departs from a food-centric approach to examine how various dinner rituals might influence the BMIs of children and adults.

Outcome, Measures and Analysis: In this study of 190 parents ($BMI = 29.1 \pm 7.2$) and 148 children ($BMI = 20.3 \pm 4.4$), the relationship between their BMIs and everyday family dinner rituals was examined using both correlation and regression analysis (controlled for educational level of parents).

Results: Families who frequently ate dinner in the kitchen or dining room had significantly lower BMIs for both adults ($r = -.31$) and children ($r = -.24$) compared to families who ate elsewhere. Additionally, helping cook dinner was associated with higher BMI for girls ($r = .26$), and remaining at the table until everyone is finished with eating was associated with lower BMI for boys ($r = -.31$).

Conclusions and Implications: Dinner tables may be one place where social support and family involvement meet - both of which relate to the BMI of children as well as parents. Family meals and their rituals might be an underappreciated battleground to fight obesity.

Funding: None

P31 Healthier from Home? Lunch Source and Daily Calorie Cycling In Children

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Objective: To examine differences in caloric intake between students who bring their lunch from home and those who participate in the National School Lunch Program (NSLP).

Study Design, Setting, Participants, and Intervention: School Nutrition Dietary Assessment Study 3. Elementary, middle, and high school students across the U.S. Within each school food authority (district), children were randomly selected as eligible to complete a 24-hour dietary recall for 2314 children. Data were collected in 2005.

Outcome, Measures and Analysis: Outcome measures were total calories at specific time points throughout the day: breakfast, morning snack, lunch, afternoon snack, dinner, and evening snack. Regression analyses were run with lunch type-home, NSLP, or a la carte-as the predictor variable, controlling for body mass index (BMI), age, gender, and parental income.

Results: Students who brought their lunch from home ate 96 more calories at lunch ($p < 0.001$) and 20 more calories at a snack prior to lunch ($p = 0.047$). Yet, students who brought lunch from home ate 38 fewer calories for an after dinner snack ($p = 0.013$). There was no difference in calories consumed between a la carte and NSLP lunches.

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Conclusions and Implications: Despite many criticisms, children who eat school lunches eat fewer calories at lunch compared to students who bring lunch from home. Interestingly, though, students who bring lunch from home may be front-loading their calories earlier in the day when compared to NSLP students. Thus student consumption patterns outside of school should be better understood to identify solutions to help reduce childhood obesity.

Funding: None

P32 Training Program Tailored for Instructors of Eat Smart, Live Strong Nutrition Education Program for Older Adults

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Objective: The objective of this project was to design a training program for instructors of the Eat Smart, Live Strong (ESLS) curriculum. ESLS focuses on healthy eating habits in older adults (60-80 years old).

Target Audience: The training program was designed for extension educators and paraprofessionals.

Theory, Prior Research, Rationale: Previous studies have shown that educators' knowledge of a program and their ability to transfer the information affect the intervention outcomes. A multidisciplinary committee designed the training with the objective to increase instructors' knowledge, skills, and self-confidence in teaching ESLS.

Description: Training included three parts: an on-line course, a human subjects training, and face-to-face training. The training included components of programming and evaluation. The on-line, self-paced training included topics such as recruitment, teaching older adults, and units reviewing each lesson. The face-to-face component included practice teaching sessions for each lesson. Each instructor received copy of the curriculum, handouts, food models, and other suggested resources.

Evaluation: Because the first cohort of instructors (n=21) trained were highly satisfied with the program, and the ESLS curriculum significantly increased fruits and vegetables intake among seniors, the program was replicated. During the last two years, a total of 110 instructors have participated in the training. Evaluation results suggested that instructors are highly satisfied and that their knowledge and self-confidence have improved as a result of the training. This training has positively affected the quantity and quality of Extension outreach to low-income seniors.

Conclusions and Implications: The ESLS training program designed by MSU Extension is a tool available to be

used or replicated by other SNAP-Ed implementing agencies.

Funding: Supplemental Nutrition Assistance Program - Education

Additional Funding: USDA Food and Nutrition Service and USDA Supplemental Nutrition Assistance Program

P33 Efficacy of a Guided Goal-setting Intervention for Low-Income Parents to Reduce Risk of Pediatric Obesity: Preliminary Results

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Objective: To reduce risk of pediatric obesity, behaviorally focused parental education is needed. The purpose of this study was to test the efficacy of a guided goal setting intervention for low-income parents of young children.

Study Design, Setting, Participants, and Intervention: Parents (n=99) from Head Start participated in the study. Treatment group parents participated in a 5-week nutrition, child feeding and physical activity intervention including guided goal setting. Parents in the control group received no intervention.

Outcome, Measures and Analysis: Data were collected at baseline(T1), 6 weeks(T2) and 1 year (T3) using a parent self-administered UCD Healthy Kids (HK) nutrition/PA behavior tool and child anthropometrics.

Results: Treatment group parents showed significant improvement in the HK nutrition/PA tool (p=.04) from T1 to T2 that disappeared when factoring in the control group. Children whose parents were in the treatment group showed a lower rate of BMI >85% increase (+6.2%) compared to the control children (+14.3%) from T1 to T3.

Conclusions and Implications: Based on this sample, the guided goal setting intervention may be an efficacious behavioral strategy for low-income parents of young children as it appeared to have slowed the overweight/obesity rates in the treatment group children. The HK tool itself could have served as an intervention as indicated by the improvements seen in the control group. Future research should include a larger sample and participant randomization.

Funding: NIFA

P34 Cooking Equipment in Low-Income Households

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