O45 (continued)

Evaluation: ODPHP conducted usability testing on the toolkit messages and is collecting comments at conferences, as was requested in the audience research.

Conclusions and Implications: This toolkit supports health professionals as important partners in sharing Guidelines recommendations with patients. Health professionals can initiate discussions, provide referrals to registered dietitians and nutrition educators, and encourage patients to follow-up in seeking nutrition counseling.

Funding: US Department of Health and Human Services

O46 Are We Listening? How to Engage Low-Income Caregivers with Nutrition Messaging

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Objective: To identify preferred nutrition information sources, messages, and communication channels for limited-resource caregivers of school-aged children.

Study Design, Setting, Participants, Intervention: Participants were recruited from telephone surveys that screened for eligibility based on being caregivers of children ages preschool to fifth grade and residing in a household receiving federal assistance. Nine focus groups were conducted in community locations.

Outcome Measures and Analysis: Shannon and Weaver's Mathematical Theory of Communication framed questions that focused on concepts related to trusted sources for nutrition information, messages most likely to foster healthy eating, and preferred communication channels. Focus group recordings were transcribed and analyzed for common themes by two researchers. Discrepancies were discussed and resolved.

Results: 108 individuals participated. They identified trusted sources of nutrition information that included professionals such as nutritionists, doctors, and teachers as well as health-focused celebrities. Participants were most interested in information regarding meal preparation, benefits of healthy eating, and simple strategies for making healthy choices. They preferred internet and social media and posters placed in agency lobbies.

Conclusions and Implications: Low-income participants trusted information from nutritionists but prefer to receive nutrition information through social media and online sources rather than the traditional face-to-face methods. Practical information - recipes and money saving strategies - were most desired. Findings provide essential insight into strategies for communicating nutrition content to limited-resource caregivers. This presentation will focus on how nutrition education professionals can use these findings to tailor education to engage the target population using sources, messaging and communication channels most preferred by the group.

Funding: Supplemental Nutrition Assistance Program - Education

O47 Don't Reinvent the Wheel: Ohio SNAP-Ed's Social Marketing Campaign as a Model for Health Promotion to Low-Income Families

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Objective: To thoroughly document the process of the SNAP-Ed social marketing campaign in order to generate a social marketing model that could be replicated by SNAP-Ed or other social service programs across the country.

Target Audience: Any agency or group interested in launching a social marketing campaign to promote health and nutrition.

Theory, Prior Research, Rationale: Social marketing is a popular and effective tool for achieving behavioral changes in a population. Health and nutrition-related campaigns include Oregon State University's FoodHero and the Iowa Nutrition Network's Pick a Better Snack.

Description: Ohio SNAP-Ed is partnering with the State Nutrition Action Committee (SNAC) to design a social marketing campaign to promote fruit and vegetable consumption among low-income (at or below 185% of federal poverty) families with children. The entire process will be carefully documented and translated into a model for other agencies and groups to apply to their own health promotion issues.

Evaluation: The efficacy of the campaign will be determined by the target audience's knowledge and recognition of the campaign following the statewide rollout. In addition, behavior change in the form of increased fruit and vegetable consumption will be measured. These success metrics will be used to optimize the model.

Conclusions and Implications: While the results of many social marketing campaigns are well documented and show that social marketing is extremely effective, the complete process has not ever been documented in such a way as to make a campaign easily reproducible. By using the SNAP-Ed campaign to generate a model, this research will help define the future of social marketing for health promotion.

Funding: Supplemental Nutrition Assistance Program - Education

O48 Dietary Guidelines for Americans: The Past, Present, and Future

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O48 (continued)

Objective: The Dietary Guidelines (Guidelines) provides food-based guidance to help promote health and prevent chronic disease. Like nutrition science, dietary guidance continues to evolve.

Target Audience: The target audience is health professionals who implement the recommendations to reach consumers through programs, policies, and educational initiatives of Federal and other public health programs and services. The Guidelines has traditionally addressed Americans two years of age and older.

Description: By statute, every five years the U.S. Departments of Health and Human Services and of Agriculture jointly publish the Guidelines. While the core of the Guidelines has remained relatively consistent over time, it has evolved with the science from a focus on nutrients to foods and, more recently, to overall eating patterns. Additionally, the range of topics addressed has grown over time.

Rationale: The Guidelines evolves as a result of changes in the science, advancements in the process to review the science, and consideration of topics of public health importance current at the time. Future editions will continue to evolve. For example, beginning with the 9th edition, the Guidelines will address pregnancy and children from birth on.

Evaluation: Each edition of the Guidelines builds on the previous, with the scientific justifications for revisions informed by an in-depth review of the science.

Conclusions and Implications: The Guidelines serves as the evidence-based foundation and a critical tool for health professionals. Federal food programs and educational outreach rely on the Guidelines and its scientific underpinnings. Nutrition educators remain essential as communicators of the Guidelines through the sectors and settings where Americans make food choices.

Funding: US Department of Health and Human Services

O49 Effective Nutrition Interventions for Sustainable Maternal and Child Health: Lessons from the Countries that Achieved Their MDG 4 and 5 Targets

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Objective: The purpose of this study was to examine the factors that contributed to the attainment of Millennium Development Goal (MDG) 4 and 5, and determine the level of their intervention based on Maternal and Child Health (MCH) conceptual framework.

Study Design, Setting, Participants: The study examined the interventions conducted by 15 countries, who achieved their MDG 4 target by at least 5.0%, and MDG 5 target by 5.5%, or both, and three countries that did not achieve their target for MDG 4 and 5.

Results: The countries that succeeded in achieving their target for either MDG 4 or 5 intervened at three

levels namely basic or societal level, underlying causes or community level, and direct causes levels. For example, Ethiopia, succeeded in the achievement of MDG 4 by improving basic services at the societal level, increasing healthcare services and providing specialized nutrition intervention to malnourished children. On the contrary, the countries that did not succeed did not address the basic causes, or did not implement their policies. Cameroon only worked at the direct causes, ignoring societal level and underlying causes. Botswana and Zimbabwe worked at the direct and underlying causes, and developed policies but failed to implement them.

Conclusions and Implications: It is critical that policymakers work on societal level problems, address the cause of the problems by addressing the underlying causes and focus on capacity building. Health professionals need to consider the motivations and limitations of the target population, including nutrition education. Targeting behavior change has the potential to result in sustainable MCH.

Funding: None

O50 Reduction of Geophagic Practices and Nutrition Promotion in Women of Reproductive Age in Rural Kenya: A Pilot Study

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Objectives: Geophagia, the deliberate consumption of earth or stones is widespread in sub-Saharan Africa. This practice is associated with exposure to heavy metals and parasites, micro-nutrient deficiencies and poor pregnancy outcomes. Our study aimed to characterize and reduce the practice of geophagia in Nakuru, Kenya and implement a nutrition education program to improve dietary intake.

Study Design, Setting, Participants: A prospective study was carried out in 135 women of reproductive age (15-49 y) known to practice geophagia. Baseline data was collected and evaluated knowledge, attitudes and practices (24-hour recall) regarding diet and geophagia. This was followed by a half-day educational intervention primarily based on the health-belief model.

Outcome Measures and Analysis: Descriptive statistics were used along with analyses of pre and post data using the Wilcoxon signed-rank test.

Results: Geophagia cut across all ages with 91(67.4%) consuming ≥ 100 g/day. Strong cravings were reported by 81.5% as the primary reason for geophagic practices. The most common negative effect reported by participants was constipation (16.3%). Nutrition education focusing on the dangers of geophagia elicited a decrease in amount of geophagic material consumed per day in 82 (77%) of participants ($Z = -7.914$, $p < .001$). Following the intervention, the proportion of participants who

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