Nutritional Problem

Food insecurity, categorized as with or without hunger:
- Low food security (without hunger) reports reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake
- Very low food security (with hunger) reports multiple indications of disrupted eating patterns and reduced food intake

Prevalence of Food Insecurity
- 11.4% in Massachusetts
- 10.4% in Worcester County
- 7.1% of children are food insecure (% households)

Average Household Income: $46,658
Poverty: 11.0% below poverty level

Language
Linguistically Isolated Individuals in Worcester: 14.53%
Worcester Households that speak a language other than English: 21.7%

Education
High School Graduate: 28.23%
Bachelor’s or Higher: 30.06%

Food Insecurity

Population Health Clerkship: Food Insecurity
Greenberg, S., Mooncai, T., Nguyen, M., Rose, C., Vincent, J., Williams, J.
Preceptor: Brodowski, K.

Community Assessment

Goals:
- Cooking Demo: demonstrate how to cook a healthy, delicious meal on a low-income budget
- Photo Booth: conduct a community needs assessment for quality improvement of REC mobile market & Cooking Matters programming and to elicit community perspectives of food and health

Progress:
Cooking Demo: We undertook a challenge to cook recipes that could feed a family of four with only $10. Using Cooking Matters recipes as a resource, we cooked three different meals, which we demo’ed at the Main South Farmer’s Market. Community members were able to sample and discuss the food, and take home recipes plus other educational handouts.

Photo Booths: We used a "photo booth" to survey the community at various REC farmer’s markets on topics that our partners, REC Mobile Market and Cooking Matters identified as areas of interest. We designed questions to gain perspective on: 1) perceived connections between food and health 2) what they want addressed in programming and 3) how to improve the quality and access of healthy food.

Outcomes:
Cooking Demo:
- All recipes were well received, no food was leftover
- Many people took home the recipes to try on their own
- Several individuals signed up to receive Cooking Matters e-mails

Photo Booths:
Key Survey Results
- 80% of participants (32/40) related food to health
- 35% of participants (11/41) cited low access as a barrier to healthy eating
- 20% of participants (3/15) cited affordability as a barrier to healthy eating

Discussion

Lessons Learned:
- Effective strategies to grocery shop on a budget
- Participation in school lunch program across the state is well below the national average
- Local community members associate a strong connection between food and health.
- Effective nutrition and cooking programs need to account for cultural preferences
- Insight into factors involved with nutritional programming

Key Take-Aways:
- Knowledge of local and national resources available to patients with food insecurity
- Provider screening for food insecurity is an important measure in combating hunger
- Increased awareness of monetary costs of buying fresh and healthy foods

Recommended Next Steps:
- Standardization of screening tools and policy for providers to efficiently identify patients experiencing food insecurity
- Design and distribute centralized database for patients and providers to access food insecurity assistance resources
- Formally integrate food insecurity education into medical professionals' curricula

Acknowledgements

Regional Environmental Council (REC)
Cooking Matters: No Kid Hungry
Cooking Matters Nutrition Education Program

References:
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Interprofessional network

Government
Healthcare Providers
Nonprofit Organizations
Private Sector
Food System
Financial Institutions
Policy
Community