

Combating obesity among America's teens: Investigating factors that influence consumption of fruits & vegetables among teens in Springfield MO

Prepared by:

Florence O. Uruakpa, Assistant Professor, Department of Biomedical Sciences

Abstract [Provide a maximum 150 word abstract]

Strong link between diet and health brings spotlight on healthy practices that support health and wellness. It is an understatement to call childhood obesity a “killer disease” in America. About 32% U.S. children 2-19 years are overweight or obese, with 17% of children obese. High-tech age provides America's teens convenient and affordable environment to consume calorie-dense, nutrient-deficient foods. Thus, efforts to maintain youths' longevity in America need to encourage teens to eat fruits/vegetables for achieving & maintaining healthy weight. This study develops interventions that enable teens to maintain healthy weight. Convenience sampling was used to select about 60 teens 11-18 years from low income households at Boys & Girls clubs in Springfield. Smoothie/salsa workshops were held and participants completed questionnaire to identify what they consider healthy eating behaviors. Effective nutrition education tips for teens will enhance life-long consumption of fruits/vegetables and help develop strategies that promote healthy eating among teens.

Purpose [State the main purpose or central problem]

Examine adolescents' attitudes towards intake of fruits/vegetables, and develop strategies for promoting healthful eating behaviors among teens in Springfield, MO

Learning Objectives [List up to three main learning objectives]

- Know tips for promoting intake of fruits and vegetables among teens
- Identify the strategies for integrating community service into coursework
- Learn functional interactions models for college students and teens in the community
- Create platform for translating basic concepts into life-changing activities for target groups

Synopsis [Write a brief – three to five paragraph – and concise overview of the topic. Ideally, this synopsis flows from the outline of the main points to be made in the presentation]

Environments that provide opportunities for teens to be physically active are very limited with few kids/youths not getting the 60 min/day physical activity recommended by government agencies. For America to maintain her youths' longevity, it is important for teens to reduce intake of energy-dense, low-nutrient foods to achieve and maintain healthy body weight. One way to do this is for teens to increase their intake of fruits and vegetables.

Childhood obesity initiatives often focus on geographic areas where food insecurity is prevalent. About 60 teens 11-18 years old from low income households at Boys & Girls Clubs of Springfield participated in the study. Smoothie and salsa mini workshops were organized for the teens; and they completed questionnaire to identify what they consider healthy eating behaviors. The study examined the following: i) What teens in Springfield consider as healthy eating behaviors; ii) The factors that influence the intake of fruits and vegetables among adolescents; and iii) Strategies that promote healthy eating among teens to prevent childhood obesity in Springfield, mainly among low-income and minority populations at highest risk for obesity

Findings show that 81% adolescents will increase intake of raw fruits/vegetables if dip/sauce is provided. Peer/friend and parent influence on food selection was high at 77% and 70%, respectively. Preference for cooked and raw vegetables was 40% and 42%, respectively. Teens are willing to try new fruits/vegetables while most noted that friends influence their food selection decisions. A 60% awareness of MyPlate guidelines by teens underscores the importance of continued provision of nutrition education in this target group. Utilizing these tips by teens will enhance healthful lifestyle modifications via consumption of fruits/vegetables.

Suggested Practices [Provide a bulleted list of suggested practices]

- Take active role in the community with students via service learning
- Initiate students into small hands-on research process such as design, data collection, collation, analysis; and IRB training
- Train/mentor students in research even in the absence of major external grants
- Provide platform for students to learn about manuscript writing and publication
- Collaborate with community partners in service learning activities

References [List references used in your presentation]

American Heart Association. Heart Disease and Stroke Statistics, 2010a Update At-A-Glance
http://www.americanheart.org/downloadable/heart/1265665152970DS-3241%20HeartStrokeUpdate_2010.pdf

American Heart Association. Heart Disease and Stroke Statistics, 2010b Update. Table 6-1.

<http://circ.ahajournals.org/cgi/reprint/CIRCULATIONAHA.109.192667>

Boyer, J., Liu, R.H. (2004). Apple phytochemicals and their health benefits. *Nutrition J.*, 3: 1-15.

Centers for Disease Control and Prevention. Cholesterol Facts.

<http://www.cdc.gov/cholesterol/facts.htm>;

<http://www.cdc.gov/nutrition/everyone/fruitsvegetables/index.html>

Centers for Disease Control and Prevention. National Diabetes Fact Sheet, 2007a.

http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2007.pdf

Centers for Disease Control and Prevention. National Diabetes Fact Sheet, 2007b.

http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2007.pdf

Egan BM, Zhao Y, Axon RN (2010). U.S. trends in prevalence, awareness, treatment, & control of hypertension, 1988-2008. *JAMA*, 303: 2043-2050. Estimates projected to U.S. population in 2009

Ogden CL, Carroll MD, Curtin LR, Lamb MM, Flegal KM (2010). Prevalence of high body mass index in U.S. children and adolescents, 2007-2008. *JAMA*, 303: 242-249

National Cancer Institute. Surveillance Epidemiology and End Results (SEER) Stat Fact Sheets: All Sites.

<http://seer.cancer.gov/statfacts/html/all.html>

Norusis, MJ (2012). *IBM SPSS Statistics 19 Guide to Data Analysis*. Upper Saddle River: Prentice Hall Inc.

USDA/US DHHS (2010). *Dietary Guidelines for Americans, 2010*. 7th Edition, U.S. Department of Agriculture and U.S. Department of Health and Human Services, Washington, DC: U.S. Government Printing Office, December 2010; www.dietaryguidelines.gov

<http://www.healthyeatingresearch.org/>

<http://www.healthypeople.gov>

<http://www.health.gov/dietaryguidelines/dga2010/DietaryGuidelines2010.pdf>

Additional Resources [Provide any additional useful resources on your topic]

Not applicable