

## Community-Based Obesity Prevention and Intervention Approaches: From Infancy to Adulthood

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How is it, that despite our increased awareness and knowledge on health and wellness, the prevalence of obesity in the United States continues to be alarmingly high? Nationally, over one-third of adults and almost 17% of youth were obese in 2009-2010 (CDC, 2012; Ogden, Carroll, Kit & Flegal, 2012). Across the U.S., nine states had an obesity prevalence of over 30% in 2009 compared to no states in 2000, and *none* of the 50 states met the Healthy People 2010 objective of lowering obesity prevalence to 15%. And in 2008, medical bills for obesity-related conditions such as heart disease, diabetes, stroke and some cancers amounted to about \$147 billion (CDC, 2010).

Given these staggering statistics, more innovative and ecologically-valid prevention and intervention efforts are needed—particularly those that target populations belonging to specific stages of the lifespan, as well as ethnic minority groups who are disproportionately affected by obesity. According to results from the 2009 Behavioral Risk Factor Surveillance System, obesity prevalence is highest among non-Hispanic blacks (36.8%), followed by Hispanics (30.7%), non-Hispanic Whites (25.2%), and other (16.7%).

The papers in this special issue not only contribute to current knowledge in reducing the obesity epidemic that is front and center of our public health efforts, the focus is on community-based research and multiple intervention approaches for infants, children, adolescents, college students, and adults among the underserved and minority population.

### **Highlights of the Special Issue**

During infancy, breast milk is the best source of food as well as reducing the risk for obesity later in life. One mechanism to increase breastfeeding

among minority women is through culturally sensitive interventions that address both barriers and assets in promoting dialogs about the benefits of breastfeeding. The Prado et al. study for example, used a *telenovela* (soap opera) approach to deliver breastfeeding educational messages to Latino women.

Parents should allow young children to self-regulate the food portions they consume at each meal. In older children, parents can promote the eating of vegetables and fruits, provide a healthy breakfast each day, and restrict access to calorie-dense packaged foods and sugared beverages. Outside the home, afterschool programs and community-based organizations such as the Boys and Girls club and YMCA have the potential to reach many underserved school-aged children in promoting healthy eating and increasing their physical activity. For example, Kessler et al. took a garden-based nutrition education approach to increase fruit and vegetable intake among 6- to 12- year old children. Similarly, Branscum and Kaye conducted a nutrition education program *Food Fit* for 3<sup>rd</sup> through 5<sup>th</sup> grade children and the authors reported the results of their process evaluation. In Wiersma and Rubin's paper, the authors presented their results for *Active Kids*, a game-based afterschool intervention that provides Hispanic youth with physical activity opportunities.

From middle childhood to adolescence, parent-child communication can foster healthy eating behavior during this critical developmental period in which pre-teens and teens are exerting more independence and forming their identity. Brown, Teufel, Gautam, Norrick and Birch investigated early adolescent eating patterns such as breakfast consumption, fruits and vegetable intake, and the association between

family discussions and perceived control over food choices on self-reported eating behavior. In addition to healthy eating, parents can also model and encourage frequent physical activity by instituting family-centered physical recreation on a regular basis. The article by Mohammad, McMahan, Mouttapa, and Zhang addresses this very issue with their pilot study of a family-based nutrition and physical activity program.

Young adults in colleges and universities are one of the highest at-risk groups for obesity, largely due to their drastic changes in diet, physical activity, and alcohol consumption that are associated with their increased independence from their parents. According to the National College Health Assessment, about 12% of college students were obese and 22% overweight (American College Health Association, 2012). In this special issue Hanlon, Weiss, McMahan, and Cheng provided a novel decision-making framework in understanding healthy eating pattern among a multiethnic sample of college students.

### **Conclusion**

A common theme shared by the papers in this issue is the focus on underserved minority populations, community collaborations, and/or interdisciplinary approaches towards obesity prevention and intervention. Many of the articles highlighted here are innovative, community-based programs that are promising in reducing obesity or original research that contributes to the understanding of health behaviors and related risks for obesity.

Knowledge, education, and access are the foundations for both parents and children to improve healthy eating and physical activity. Family communication remains important for adolescents and they often look to their parents as role models. In the adult years, particularly during the emerging adulthood period of 18-25

years whereby young adults experience lifestyle transitions and face life-changing decisions, individual decision-making play a crucial role. More importantly, within each age group researchers must take into consideration the unique biopsychosocial, cultural or contextual influences that act as predisposing or enabling factors to behavior change. And finally, more research is needed among those with special needs or genetic disorders that predispose them to obesity and other health risks. The study by Rubin et al. for example, described physical activity patterns and emphasized the pivotal role parents and caregivers play in facilitating physical activity levels in individuals with Prader-Willi Syndrome.

In the Surgeon General's Vision of a Healthy and Fit Nation, Regina Benjamin calls Americans to join her in an effort to reverse the growing obesity trend (U.S. Department of Health & Human Services, 2010). She discusses the root causes of obesity, and emphasizes the importance of nutritious food and more physical activity to halt the epidemic. The World Health Organization (2012) suggests that curbing the obesity epidemic in children must be a joint effort between parents, schools, and national governments. Parents must be responsible for promoting healthy eating and physical activity at home. Stress reduction strategies may also be used to combat obesity, since stress so often undermines people's efforts to maintain healthy eating and active lifestyles.

One thing is certain—human beings desire to live long and live well. To achieve this goal, nutrition and physical activity are vital. Our efforts in prevention, intervention and service delivery at the individual- and community-level must continue to push forward by tailoring to the unique needs of each population and designing strategies most effective at different stages of the lifespan. The food industry and built environment will take decades to change—but the health of our nation cannot wait.

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