

Seeding new ideas in adolescent eating habits

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Adolescence is a time of intense growth and development with nutritional vulnerability. As adolescents become more independent, they begin making their own meal and snack choices, and there tends to be a decrease in healthy eating habits. Adolescents have been shown to have an increased consumption of sweetened beverages and fast foods high in fat as well as a decreased consumption of fruits, vegetables, and dairy products.¹ In Milwaukee, survey data collected by the Milwaukee Public Schools indicate that 37% of students are overweight or obese.² Educating adolescents about healthy eating habits and increasing their exposure to healthy foods could help promote healthier nutritional behaviors and lead to a decrease in overweight/obesity and related health consequences like heart disease and diabetes.

During a pediatric residency research elective in July and August 2009 under the guidance and mentorship of Earnestine Willis, MD, we embarked upon an observation of potential barriers to healthy eat-

ing by speaking with community-based organizations that promote healthy lifestyles among adolescents and by visiting local food distributors (supermarkets, convenience stores, corner stores, farmers markets). Limited access to healthy and nutritious foods, particularly fresh produce, and the accessibility of fast food restaurants were identified as barriers to adolescents' healthy eating.

We identified and visited 9 local food distributors in Milwaukee's central city most frequented by low-income families because they were in close proximity to community-based organizations with youth programming and adolescents were observed to frequent these stores. The large majority of stores visited were locally owned corner stores that are similar to convenience stores but located in a residential area. Recent studies have shown that a significant portion of urban children's caloric intake comes from these stores.³

In assessing the food products available at corner stores, we observed that while all stores had some selection of canned vegetables and fruits, there were limited sources of fresh fruits and vegetables. Most corner stores had a small selection of fresh fruits and vegetables that was often difficult to find because it was located at the ends of aisles, toward the back of the store. At the front of the store, however,

sweetened beverages, soda, and high calorie foods such as chips and candy bars were prominently displayed. In comparison, supermarkets had a wider variety and supply of fruits and vegetables and the quality and price was superior to corner stores. However, these supermarkets still had high calorie beverages and snacks located near the store's entrance.

A promising component of our observations was the amount of local gardening projects based in Milwaukee's neighborhoods. These grassroots movements are becoming areas of neighborhood promotion of fresh fruits and vegetables. Notable examples include the garden project by Walnut Way Conservation Corp and the large urban farm run by Growing Power, Inc.

Walnut Way is a resident-led, community development organization serving the Milwaukee central city neighborhood whose mission includes transforming vacant, debris-filled lots into productive gardens and orchards.⁴ Growing Power, Inc consists of a large urban farm and community food center that provides hands-on training, on-the-ground demonstration, outreach and technical assistance through the development of Community Food Systems, which help people grow, process, market and distribute food in a sustainable manner.⁵

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Both Walnut Way and Growing Power have programs that expose area youth to gardening/farming and working with fresh fruits and vegetables. Research suggests that youth garden programs have the potential to increase youth's willingness to try new foods and eat more fruits and vegetables, but further study is needed.⁶ In addition to these grassroots movements, there are also inexpensive fruit and farmers markets that provide a large variety of fresh fruits and vegetables. Opportunities may exist for neighborhood high schools and corner stores to partner with these local grassroots programs to increase adolescents' access to healthy foods.

As part of this project, we provided a nutrition promotion presentation to 27 Milwaukee youth, ages 9-12 at various Boys and Girls Clubs. We gave a 1-hour interactive PowerPoint presentation to review the food pyramid, portion size, healthy snacking, and physical activity recommendations. Additionally, we prepared a nutritious snack with the participants and brought in common packaged food items to demonstrate how to read nutrition labels. Youth seemed familiar with the new food pyramid and current nutritional guidelines but lacked knowledge regarding appropriate portion sizes, physical activity as it relates to caloric expenditure, and the importance of regular meal consumption. After our talks, a post-presentation survey indicated immediate improvement in the participants' nutrition knowledge. The next step becomes bridging the gap between knowledge of healthy eating behaviors and the actual implementation of these healthy behaviors, which is largely dependent on the availability of nutritious foods.

So what then is the role of the medical professional in promoting

greater access to fresh fruits and vegetables for Wisconsin's adolescents? From our observations, it appears that children and adolescents are willing and eager to eat better. The challenge is to reach out not only to children but also to parents, promoting healthy eating behaviors at health checks, advising on healthier food choices, shopping at farmers markets and promoting engagement in local gardening projects. Health care professionals must recognize and acknowledge that families face social and economic factors that limit their access to healthy foods, and we must work together with parents, patients, and community-based organizations to promote and address healthy eating behaviors despite access issues.

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