An Ecological Approach to Adolescent Obesity: 
Working Together to Support Healthy Youth

by Mary Maley

It's no secret that Americans are facing an obesity problem. Childhood obesity has more than tripled since 1980. An analysis of 2008 data found that one in three adolescents aged 12-19 years are overweight or obese (Ogden, Carroll, Curtin, Lamb, & Flegal, 2010). Addressing obesity among children and adolescents is a top public health priority in the United States (U.S. Department of Health and Human Services, 2012).

How can communities respond to the problem of obesity among adolescents? Ecological models, which consider individual behavior in the context of multiple environments, offer promising approaches to obesity prevention (Egger, Swinburn, & Rossner, 2003; French, Story, & Jeffrey, 2001; Hill, Wyatt, Reed, & Peters, 2003; Sallis et al., 2006). By moving beyond a singular focus on personal responsibility, communities can create environments that support healthy living.

Special Risks for Youth

According to the Centers for Disease Control and Prevention (2011), youth who are obese are at increased risk for a variety of health problems, including high cholesterol and high blood pressure, which are risk factors for cardiovascular disease. They are more likely to have blood glucose levels that put them at risk for developing diabetes. Obesity can lead to sleep apnea, as well as problems with bones and joints. In addition, people who are obese as adolescents are more likely to be obese as adults, increasing the chance that they will experience a range of serious health problems in adulthood.

Negative perceptions of physical appearance can also interfere with the process of understanding identity, which is a key developmental task in adolescence. Often facing stigma, obese children have reported more negative body image, scored lower on self-worth scales, and exhibited more behavior problems than non-obese children (Braet, Mervielde, & Vandereycken, 1997).

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Ecological Approaches

Individual behavior change and biology have traditionally been the focus of interventions to address obesity. However, social, economic, and physical factors in the environment can either support or discourage physical activity and healthy eating. Ecological approaches shift the focus from the individual to the environment, aiming to make physical activity and healthy food choices more accessible to everyone in the community.

The chart below highlights the differences between individual and ecological approaches to obesity prevention:

<table>
<thead>
<tr>
<th>Individual Approaches</th>
<th>Ecological Approaches</th>
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</thead>
<tbody>
<tr>
<td>Focus on changing the person.</td>
<td>Focus on changing the community.</td>
</tr>
<tr>
<td>Focus on individual behavior change.</td>
<td>Focus on structural, social, economic, or policy change.</td>
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<tr>
<td>Responsibility for change lies with the individual working with health professionals.</td>
<td>Responsibility for change lies with community leaders, policy makers, and health professionals working with citizens.</td>
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<tr>
<td>Reach people who are interested in changing.</td>
<td>Reach everyone in the environment.</td>
</tr>
<tr>
<td>Educational approach.</td>
<td>Community development approach.</td>
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(Maley, 2005)

Positive Youth Development

Positive youth development is an ecological approach that provides a helpful framework for addressing public health objectives, including obesity (Kreipe, 2006).

Ecological models direct us to consider all influences on food and physical activity choices. We can start by asking, “What are all the things that influence the way we eat and how much we move?” This question will help us explore the social, economic, and physical elements of the environment, as well as the changes in policy and practice that might make a difference. A positive youth development approach would include youth in exploring this question, interpreting the answers, and making decisions about needed changes. It would also guide us to address this question with a broad-based community coalition. Recognizing that youth grow up interacting with many different environments (their families and schools, local businesses and recreation outlets, health care settings, the judicial system, faith communities, youth programs, and online networks, among others), the positive youth development framework suggests that change can best be achieved through collaboration among many community sectors. When all of the relevant stakeholder groups -- including youth -- are at the table, we can appropriately assess the environment and identify opportunities for change.
Youth engagement and youth leadership are critical to the success of any effort to address adolescent obesity. When involved from the outset in research and assessment, young people can point to the challenges and opportunities for healthy living in their environments: how easily they can purchase fresh fruit, for example, or how much risk they face in using a local park for sports (Yoshida, Craypo, & Samuels, 2011). Young people are also more likely to understand which interventions will attract and succeed with their peers, and youth leadership and modeling is essential to changing peer norms. However, programs that involve youth alone, without connecting them to decision-making bodies, are likely to limit their success to a small group of youth participants. Youth may raise awareness and change their individual habits, but unless they are included at the policy level, environmental change is unlikely.

Action Settings: Examples, Tips, Resources

In practice, ecological approaches steer us away from focusing too intently on individual efforts such as dieting to lose weight. Instead, goals are set for adults and young people to work together to create environments that support health. By making good nutrition and active lifestyle choices more accessible and popular, communities, schools, programs, and families provide a strong foundation for good health.

There are many opportunities to make environmental changes that support healthy weight.

Communities

Community members working together can go a long way toward building an environment that supports healthy eating and active living. According to one study, communities succeed when high-level leadership is complemented by broad-based partnerships involving diverse stakeholder groups, including youth. Other keys to success are using data to set goals and measure progress, and building on existing local assets and resources (National League of Cities, 2010).

- The Healthy Jacksonville Childhood Obesity Prevention Coalition (2009) and the Northeast Florida Health Planning Council engaged over 100 community partners to increase awareness of the childhood obesity problem and create a community action plan. Developed with a diverse group of local stakeholders, the plan utilizes an ecological framework to define specific action steps for local government; health care systems and providers; schools; early childhood educators; community, faith, and youth organizations; the media and marketing sector; and employers. www.dchd.net/files/DCHC_ActionPlanRev.pdf

- Using funds from a Robert Wood Johnson Foundation grant, six U.S. cities -- Charleston, SC; Jackson, TN; La Mesa, CA; Oakland, CA; San...
Antonio, TX; and Savannah, GA -- took a community approach to youth obesity. Their strategies included: reconfiguring the built environment and implementing planning guidelines to promote walking and biking; providing city-owned land or other support for community gardens; forming partnerships with local restaurants to develop and promote healthy menu items; and opening school facilities, such as tracks and athletic fields, for community use after school (National League of Cities, 2010).

Additional resources for communities:

Cornell NutritionWorks - Preventing Childhood Obesity: An Ecological Approach (online course, requires user to register for a free membership)
www.nutritionworks.cornell.edu/features/index.cfm?Action=Course&CourseID=75

Addressing Nutrition, Overweight and Obesity Among Latino Youth (Robert Wood Johnson Foundation)
www.rwjf.org/files/research/73674.saludamerica.nutrition.pdf

Schools

Schools play a particularly important role by establishing a safe and supportive environment with policies and practices that support healthy behaviors. Schools also provide opportunities for students to learn about and practice healthy eating and physical activity. Recognizing the effects of obesity on students -- including academic impacts (Pekruhn, 2009) -- many school districts are considering or have already implemented policies that make healthy food and regular physical activity more accessible to all members of the school community.

However, as Colin Pekruhn (2009, p.5) points out in a National Association of State Boards of Education policy guide, “schools cannot and should not be expected to conquer this crisis alone. Instead, schools have a responsibility to work with parents, state and local government, and communities to take the necessary steps to truly address the epidemic.” School and community efforts can be strengthened through effective partnerships. In many of the community initiatives described above, schools played a critical role.

Resources for working with schools:

Preventing Childhood Obesity: A School Health Policy Guide (National Association of State Boards of Education)
http://nasbe.org/index.php?option=com_zoo&task=item&item_id=206&category_id=65&Itemid=1033
Sports, Recreation, and Youth Programs

Organized activities like sports teams, community recreation, and after-school programs offer great opportunities for integrating messages about health into daily activities. Coaches and program leaders play an important role as mentors for youth. When leaders help young people integrate healthy eating and physical activity into daily life, they support youth for a lifetime of healthy habits.

Cornell University Cooperative Extension of New York City (2005) conducted a study on positive youth development and nutrition in sports. The study’s authors recommend that coaches and youth leaders:

- Stay informed about healthy eating and physical activity guidelines.
- Include supportive nutritional messages in communications with teams and groups.
- Provide healthy snacks at practices and activities.
- Remind participants that fitness is life-long -- even when the game is over.
- Bring parents into the conversation to include exercise and nutritious food at home.

Resources for sports, recreation, and youth programs:

Guidelines for Healthy Food and Beverages for Adolescent Health Programs
www.actforyouth.net/resources/n/n_adolescent_food_guidelines.pdf

Afterschool: Key to Health and Wellness for Pre-teens and Teens
www.afterschoolalliance.org/issue_45_Wellness.cfm
Faith Communities
Leaders of faith-based organizations are important partners for support of healthy youth (U.S. Department of Health and Human Services, n.d.).

- Part of the larger "Let's Move" initiative launched by First Lady Michelle Obama in 2010, Let's Move Faith and Communities provides activities and resources to help faith- and community-based organizations do their part to end childhood obesity. [www.hhs.gov/partnerships/resources/Pubs/lets_move_toolkit.pdf](http://www.hhs.gov/partnerships/resources/Pubs/lets_move_toolkit.pdf)
- In New York City, Cornell Cooperative Extension provided "Kitchens of Faith" training to participants from ten churches (Lang, 2008). During the 8-week program, participants learned about nutrition, food choices, and healthier recipes for congregations, soup kitchens, food pantries, and community kitchens.

Body and Soul

Key components of this successful faith-based program were:

- Involving pastors as role models.
- Using bulletins and newsletters to deliver health messages.
- Hosting a community-wide event to learn about healthy eating and sample recipes.
- Implementing policies for food at events to include healthy options.
- Developing a planning team and appointing a coordinator.
- Recruiting volunteer peer counselors.

Families
In addition to providing the opportunity to model good nutritional choices, eating a family meal together also helps reduce some adolescents' risk for using alcohol and marijuana, smoking, and having sex (Levin, Kirby, & Currie, 2012). Family food choices that include small changes to save about 100 calories per day can have a positive impact on youth (Barry, Mosca, & Hill, 2004). These changes can include simple food substitutions, offering more fruits and vegetables, and reducing portion size. Adults can also play an important role in helping adolescents develop healthy habits just by modeling those habits.

Let's Move (n.d.) recommends these ideas for families:

- Keep fresh fruit available. Prep washed and cut portions for easy snacking.
- Take a walk with your child after dinner.
- Get kids involved in menu planning and cooking.
- Share family time during meals by turning off the TV and other devices.
Resources for families:

Let’s Move: Parents
www.letsmove.gov/parents

Centers for Disease Control and Prevention: Tips for Parents
www.cdc.gov/healthyweight/children/

Remember…

While the epidemic may seem overwhelming, ecological approaches offer effective strategies. By partnering with youth and bringing together all of the relevant community sectors it is possible to make small, sustainable changes in the environment that support health and reduce the risk for obesity. ★

References


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