

Adolescent Physical Activity

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Adolescents, just like children and adults, need regular physical activity to stay healthy (U.S. Department of Health and Human Services [HHS], 2008). With the increase in electronic forms of entertainment such as video games and social media, adolescents have many opportunities to spend their out-of-school time engaged in sedentary activities. The more time adolescents spend engaged in sedentary activities, the less time they are choosing to participate in physical activities each day. However, physical activities offer many benefits for adolescents that sedentary activities do not provide. To help ensure adolescents live healthy lifestyles, communities can work together with adolescents to provide opportunities for extra-curricular activities that allow adolescents to have fun while staying physically active.

In its guidelines for physical activity levels, the U.S. Department of Health and Human Services (HHS) (2008) recommended that adolescents engage in at least 60 minutes of physical activity each day. Under the HHS guidelines, adolescents should spend the majority of their 60 minutes of daily physical activity engaged in aerobic activities to improve their cardiorespiratory fitness. Adolescents can engage in some aerobic activities of moderate intensity, but to satisfy the HHS recommendations, adolescents should engage in vigorous intensity aerobic activities as often as possible and at a minimum of 3 days a week. Many activities adolescents enjoy with their friends and peers or on their own qualify as aerobic activities; the HHS offered the following as examples: dancing, running, bike riding, and playing team sports such as soccer or basketball. The HHS guidelines further recommended that adolescents spend a portion of their 60 minutes on at least 3 days each week engaged in physical activities that help strengthen their muscles and bones. To strengthen muscles, adolescents can engage in activities such as

weightlifting exercises, rope climbing, or gymnastics (Centers for Disease Control and Prevention [CDC], 2009). To strengthen bones, adolescents can engage in activities such as jump roping, running, and tennis (HHS, 2008). Communities should make available a variety of different physical activities for adolescents, and the physical activities adolescents choose should be ones that are enjoyable to them (CDC, 2009).

The HHS's (2008) recommendations are based on the fact that regular physical activity produces important physical and mental health outcomes for adolescents. Engaging in regular physical activity helps adolescents strengthen muscles and increase bone health (Cradock, Melly, Allen, Morris, & Gortmaker, 2009). Regular physical activity further helps adolescents reduce the likelihood of becoming overweight or obese by decreasing body fat and improving physical fitness (HHS, 2008). Through regular physical activity, adolescents can also reduce their risk of developing some chronic diseases such as diabetes, cardiovascular disease, and asthma (CDC, 2012; Cradock et al., 2009). In addition to the physical health benefits, regular physical activity also improves adolescents' mental wellbeing. Regular physical activity helps improve adolescents' self-esteem and reduce symptoms of anxiety and depression (CDC, 2012). According to the Centers for Disease Control and Prevention (2012), it further may help improve adolescents' attentiveness in school and overall academic achievement.

Despite the benefits, not all adolescents engage in the recommended level of physical activity each day. Compared to healthy weight adolescent females, many underweight, overweight, and obese adolescent females spend less time engaged in physical activity (Chung, Skinner, Steiner, & Perrin, 2012). Moreover, adolescent males, compared to adolescent females, are often more physically active (Ries et al., 2009). Children generally engage in sufficient physical activity to satisfy the HHS's recommended 60 minutes a day, but youth typically

engage in less physical activity throughout adolescence (Chung et al., 2012). In a survey conducted in 2011, only 29% of high school students reported that they engaged in at least 60 minutes of physical activity each day during the 7 days preceding the survey, and 14% of students in high school reported that they had not participated in at least 60 minutes of physical activity on any of the preceding 7 days (CDC, 2012). Middle school students may not fare any better; as few as 8% of adolescents aged 12-15 years engage in physical activity that satisfies the HHS recommendations (Cradock et al., 2009). Clearly, communities should consider the need for interventions to increase the time adolescents spend engaged in physical activities, and special focus should be placed on increasing physical activity among female adolescents in particular.

Allison et al. (2005) found that male adolescents commonly cited difficulties accessing opportunities for physical activity as a barrier to regularly participating in physical activity. The adolescents in Allison et al.'s study suggested that they would increase their levels of physical activity if more opportunities for physical activity were available in their environments. Dwyer et al. (2006) similarly found that female adolescents cited a lack of affordable opportunities for physical activity and usable recreational facilities as barriers to engaging in regular physical activity. Cradock, Melly, Allen, Morris, and Gortmaker (2009) conducted a study involving middle school adolescents and found that adolescents who attended school in a neighborhood with a high density of employees in youth-friendly destinations engaged in more physical activity on the weekends than youth who attended school in a neighborhood with a low density of employees in youth-friendly destinations. Therefore, to increase adolescent physical activity, communities should consider implementing strategies designed to increase the number of youth-

friendly opportunities for physical activity within safe walking distances of adolescents' schools and homes (Cradock et al., 2009).

While barriers exist to adolescent participation in regular physical activity, peer support can act as an important motivator for adolescent physical activity. Fitzgerald, Fitzgerald, and Aherne (2012) identified a correlation between support from friends and peers and adolescent involvement in physical activity. Prochaska, Rodgers, and Sallis (2002) similarly found a strong association between peer support and the amount of physical activity self-reported by adolescents, suggesting that peer support may be an influential factor in adolescents' willingness to engage in physical activity. In addition, Fitzgerald et al. found that adolescents' desires to participate in physical activity were positively associated with the presence of peers or friends during opportunities for physical activity. Therefore, increasing friend and peer support and involvement in physical activities could help adolescents adopt a more physically active lifestyle.

In addition to peer support, adolescents are often influenced by their perceptions of opportunities to engage in physical activities within their community. Ries et al. (2009) studied a group of urban adolescents and found an association between the adolescents' perceptions of park quality and availability and their increased use of community parks to engage in physical activity. In addition, Ries et al. similarly found an association between adolescents' perceptions of their friends' park use and increased adolescent participation in physical activity in community parks. As a result, when adolescents perceive that quality parks are available for their use and are used by their friends, they may be more likely to engage in physical activity within their community.

Community structure and safety can also impact whether adolescents live a physically active lifestyle. Slater et al. (2010) found associations between unsafe environments and

decreased physical activity among adolescents and neighborhood disorder and reduced adolescent involvement in sports. In a study by Young et al. (2007) involving adolescent physical activity at school, principals cited traffic danger as one barrier to explain the low percentage of students (25%) that rode their bikes or walked to school. Slater et al. also identified an association between environments that offered more physical activity outlets and increased physical activity among adolescents. Moreover, Young et al. found that activity buses to transport adolescents home after their involvement in school-based physical activities favored involvement in those activities. Thus, when communities foster a more active lifestyle, adolescents are more likely to participate in physical activity.

The research suggests that communities have the opportunity to create environments that increase adolescent participation in physical activity. Community youth development efforts bring youth together with adult leaders in the community to work on projects that adolescents view as important. With the community youth development approach, adult leaders and adolescents can work together to find ways their community can increase adolescent involvement in regular physical activity so that all adolescents in the community are meeting the HHS's daily recommendations. Adolescents can provide key insight into the types of physical activities they enjoy, and adolescents can further help adults facilitate physical activity programs available in the community.

No one knows better than adolescents themselves what types of physical activities they enjoy. To influence adolescents to adopt a physically active lifestyle, communities need to provide opportunities for adolescents to engage in physical activities that are fun and enjoyable. A common barrier to adolescents participating in physical activity is their perception that insufficient opportunities exist or are not accessible within their community (Allison et al., 2005).

To ensure communities develop physical activities that will attract youth, community leaders should partner with adolescents to identify the physical activities youth consider most important and then work alongside adolescents to make those activities available within the community.

Community leaders can also partner with adolescents in the delivery of physical activities offered in the community. Friends and peers become increasingly important during adolescence, and research indicates that peer support can lead to increased physical activity among adolescents (Fitzgerald et al., 2012). Additionally, many adolescents have special talents in different types of physical activities. Community leaders can provide opportunities for adolescents to use their talents to influence their peers to become more physically active. If adolescents help facilitate, lead, or coach physical activities, their friends and peers or younger adolescents may be more motivated to participate, and the adolescent leaders will feel empowered by their involvement in improving the health of those around them.

In addition, adolescents can help community leaders identify barriers to physical activity in the community and develop strategies to overcome those barriers. For example, adolescents could explain their safety concerns (Slater et al., 2010) or perceptions of physical activity outlets already available within the community (Ries et al., 2009). Adolescents and adult leaders could then work together to create youth-friendly opportunities for physical activity in the community.

In summary, communities have the opportunity to promote adolescent physical activity. Like children and adults, adolescents gain important health benefits from regular physical activity (HHS, 2008). However, many adolescents do not engage in physical activity that satisfies the HHS's recommendations (CDC, 2012). Therefore, community leaders should partner with adolescents to create environments that promote a physically active lifestyle among youth.

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