

Getting Things Moving: How to Inspire Healthy Active Living in Kids

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As much fun as active free play, sports participation and other physical activity can be, less than half of US children and adolescents meet the current physical activity guidelines.

The consequences of and resultant related burdens from inactivity in our children are significant. Unfortunately, the kids most affected tend to be those who are relatively marginalized in society, including lower socioeconomic groups, ethnic minorities, girls and children with disabilities. Deliberate attention needs to be directed to these groups, so that all kids have accessible and regular opportunities for fun through free play and sports and can enjoy the numerous benefits to academics, health and well-being, as a result of being regularly active and fit.

Not Enough Exercise

There are several reasons for insufficient regular physical activity in our youth today. Some have inactive role models and have thus not seen and appreciated the value of healthy, active living by adults around them. Many kids have multiple competing priorities, including school work, an after school job, a variety of sedentary pastimes (e.g., TV watching, texting, playing video games) and church-related commitments. Safety concerns also exist for children in lower socioeconomic groups, as readily available and safe parks and bike paths are often unavailable or inaccessible close to home. Lack of funds, equipment and quality physical education are also associated with the poor physical activity exposure and levels.

Concerns About Physical Inactivity

A serious potential consequence of physical inactivity is obesity, whose incidence is unacceptable. Although recent reports show a leveling off and even a small decline in overweight and obesity in young children, the overall obesity prevalence is still 3 times higher than it was 30 years ago, and it continues to rise in adults. Currently, 17% of US children are obese. Similar to physical inactivity, particular groups are more likely to be affected or at risk. Not surprisingly, these groups include racial and ethnic minorities and the socioeconomically disadvantaged. Thirty-three percent of low-income children less than five years old are overweight or obese.

Problems With Being Big and Inactive

The primary worry is not about appearance – it's about the medical, psychosocial and economic complications

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of obesity and physical inactivity. Obese children and adolescents are at much greater risk for high blood pressure and high cholesterol. These kids can also have a variety of sleep problems, ranging from snoring and sleep apnea to bed wetting and behavior problems. Obese children can have increased difficulty managing their asthma. They can develop type 2 diabetes (formerly adult onset diabetes, as it was previously only diagnosed in adult patients) and polycystic ovarian syndrome, which can lead to infertility in women. Obese children and adolescents can develop fatty liver disease and gallstones, both of which, if left uncontrolled, could lead to liver failure. As obesity puts extra stress on the musculoskeletal system, obese children are at greater risk for knee and hip deformities, fractures and other injuries. Obese youth also have greater difficulty tolerating hot weather, especially when exercising, leading to an increased likelihood of experiencing exertional heat illness. Obesity can cause abnormal pressure in the brain, particularly in girls, potentially leading to vision loss. As blood flow to the skin can be compromised, obese children are also at increased risk of skin infections. Additional consequences and burdens of obesity include a variety of psychosocial problems, including depression and anxiety, body dissatisfaction, and teasing and bullying by peers, which may lead to missing days from school. Additional medical expenses are often linked with being obese. Moreover, obesity is associated with a social stigma.

Benefits to Active Kids

Regular physical activity has a multitude of whole-health benefits. Regular physical activity can decrease all-cause mortality risk, as well as the risk of stroke, cancer, type 2 diabetes mellitus and its complications, high blood pressure, bone loss over time and levels of anxiety and depression. Regular physical activity can also improve strength and balance, cholesterol, self-esteem and body weight and composition. With lower absenteeism and medical costs, regular physical activity provides measurable economic benefits. Kids who are physically active also do better in school and are less likely to have discipline and behavior problems.

Checking In With the Doctor

Many school systems and athletic teams require a pre-participation physical evaluation prior to starting a sports program, mainly to help screen for medical conditions that might affect sports participation and injury risk. For kids who are not joining a school sports program, it's important to check in with the child's doctor before beginning a new exercise or community sports program, especially if she is pregnant or he or she (or other family member) has any of the following: heart disease, asthma and other lung or breathing disorders, arthritis, obesity or diabetes mellitus.

Current Recommendations

Children and adolescents should aim to be physically active for at least 60 minutes per day every day of the week. The activities can be varied, but should include each of the following: aerobic (primarily, such as running, jumping rope, swimming, soccer, basketball and biking), bone building (any activity performed with the feet on solid ground or against resistance, such as jumping rope, basketball, gymnastics, walking and running), and strengthening (any activity using resistance, including one's own body weight, such as climbing, gymnastics and weight training).

Weekly Physical Activity Recommendations for Kids

Activity	Time	Frequency (days per week)
Moderate aerobic	Some or most of 60 or more minutes	3-4
Vigorous aerobic	Some or most of 60 or more minutes	3-4
Strength training	Part of 60 or more minutes	3
Bone building	Part of 60 or more minutes	3

Department of Health and Human Services 2008 Physical Activity Guidelines <http://www.health.gov/paguidelines/guidelines/default.aspx>

Adults can serve as excellent physical activity role models for children and adolescents. Therefore, it is important that parents and caregivers be aware of (and follow) their own physical activity guidelines. Adults should regularly perform aerobic activity and also set aside time for strength and balance training. Those with chronic medical conditions should follow an individualized and closely supervised plan.

Weekly Physical Activity Recommendations for Adults

Activity	Amount	Special considerations
Moderate aerobic	150 minutes	At least 10 minutes per session
Vigorous aerobic	75 minutes	At least 10 minutes per session
Strength training	2 or more times per week	Use of all the major muscle groups
Balance training	As needed, depending on physical condition	Particularly for older adults
Activity plan	As needed, depending on physical condition	Particularly for adults with chronic conditions

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How Can Inactive Kids Start Moving?

Begin slowly and simply. A good place to start is by limiting unnecessary sedentary activities, such as watching TV and playing video games, to two hours or less per day (with no rollover minutes to the weekends!). Stand, instead of sitting, while talking on the phone or texting a friend. Walk whenever possible (e.g., use stairs more often or walk the dog). Consider active commuting to school, the library, a friend's house and other places by walking or biking, instead of driving or riding in a car. These slow and simple ideas are options for everyone, regardless of socioeconomic status, gender or disability. Moreover, they are a no-cost solution that kids can start today!

As physical activity behavior improves, use the FITT principle – Frequency, Intensity, Time and Type – as a guide for progressing further. Frequency is how often you exercise. Set the goal of ultimately reaching (and maybe surpassing) the above age-matched recommendations. Intensity relates to how challenging the activity is. One easy way to gauge the right intensity (i.e., how vigorous the activity is) is to aim for an elevated heart rate and rate of breathing that accompany sweating. With time, consider how long the activity should proceed, keeping in mind the recommendations. Type is the exercise activity itself, and it should be enjoyable and accessible. Whenever the activity seems to be getting easy, challenge yourself by first increasing the frequency (if not at current recommendations). This can be followed by the extending the duration and then ultimately increasing the intensity of the activity.

The Message

In addition to decreasing the likelihood of obesity and its related health consequences, regular physical activity has a variety of other notable health benefits. Starting a habit of regular physical activity in a child can lead to a lifetime of physical activity, health and fitness! If a child or adolescent has any chronic medical problems, the parent(s) should discuss a physical activity plan with the child's medical provider, before beginning an athletic/exercise program. For those just starting a physical activity plan, remember the FITT principle and be sure to choose an activity that is fun and that can be enjoyed for life!