



Review Article

# Health Behaviors and Lifestyle Choices Among Adolescents and Youth: A Review of Trends and Interventions

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## A B S T R A C T

Adolescence and youth represent pivotal periods for establishing health behaviors that shape long-term physical, mental, and social well-being. Lifestyle factors—including dietary habits, physical activity, sedentary behavior, sleep patterns, substance use, and mental health practices—serve as critical determinants of health outcomes during this developmental stage. Globally, evidence indicates that unhealthy behaviors are prevalent among adolescents, contributing to rising rates of overweight and obesity, non-communicable diseases (NCDs), mental health disorders, and risk-taking behaviors. These trends are influenced by individual, social, environmental, and policy-level determinants, including family practices, peer influences, school environments, urbanization, marketing of unhealthy products, and access to recreational spaces.

This review synthesizes current evidence on adolescent health behaviors, identifies the key determinants shaping lifestyle choices, and evaluates interventions designed to promote healthy habits. It emphasizes the effectiveness of multi-component strategies that combine school-based programs, community engagement, family involvement, and digital or media-based interventions in fostering positive behavior change. The review also examines policy and programmatic approaches at local, national, and global levels, highlighting successes, gaps, and opportunities for strengthening adolescent health promotion.

**Keywords:** Adolescents, youth, health behaviors, lifestyle, physical activity, diet, substance use, interventions

## Introduction

Adolescence (10–19 years) and youth (15–24 years) represent critical periods for behavioral, cognitive, and psychosocial development, during which lifelong health trajectories are largely shaped. Health behaviors established during these formative years—such as dietary patterns, levels of physical activity, sleep habits, and substance use—have profound implications not only for immediate

health outcomes, such as growth, mental well-being, and academic performance, but also for long-term risks of non-communicable diseases (NCDs), obesity, and mental health disorders.<sup>1,2</sup>

Globally, a growing body of evidence highlights concerning trends in adolescent health behaviors. Low levels of physical activity, high consumption of energy-dense and processed foods, excessive screen time, insufficient sleep, and early



initiation of tobacco, alcohol, and other substances are increasingly common.<sup>3</sup> These behaviors are often interrelated, creating cumulative risk profiles that can persist into adulthood if unaddressed.

The determinants of adolescent health behaviors are complex and operate across multiple levels. Individual factors, such as knowledge, attitudes, self-efficacy, and mental health, interact with social influences, including family practices, peer norms, and school environments. Broader environmental and structural factors—such as neighborhood safety, access to recreational spaces, food availability, marketing of unhealthy products, and public health policies—further shape behavior patterns. The interplay between these determinants underscores the need for multi-level, evidence-informed interventions that target individuals, families, communities, and broader systems simultaneously.

Understanding these behavioral trends, their underlying determinants, and effective interventions is essential for promoting healthy lifestyles and preventing future disease burden among adolescents. This review synthesizes current evidence on adolescent health behaviors, explores the factors influencing lifestyle choices, and examines policy and programmatic strategies designed to support healthy habits, with a focus on translating research into actionable interventions at local, national, and global levels.

## **Trends in Adolescent Health Behaviors**

### **Dietary Patterns**

Unhealthy dietary behaviors, including high intake of fast foods, sugar-sweetened beverages, and skipping breakfast, are increasingly common among adolescents.<sup>4,5</sup> Poor diet contributes to overweight, obesity, micronutrient deficiencies, and metabolic risks.<sup>6</sup> Studies indicate that urban adolescents are more likely to consume processed and energy-dense foods, while rural adolescents may face undernutrition.<sup>7</sup> Peer influence, family habits, and food environments strongly affect dietary choices.

### **Physical Activity and Sedentary Behavior**

Physical inactivity is a global concern. WHO recommends at least 60 minutes of moderate-to-vigorous activity per day for adolescents; however, surveys show less than 25% meet this threshold.<sup>8</sup> Sedentary behavior, including prolonged screen time, is associated with obesity, cardiovascular risk factors, poor mental health, and sleep disturbances.<sup>9</sup> Adolescents in urban environments, particularly girls, are at higher risk of low physical activity.<sup>10</sup>

### **Sleep and Circadian Patterns**

Adolescents often experience delayed sleep onset, short sleep duration, and irregular sleep patterns due to academic pressures, digital device use, and social habits. Inadequate

sleep is linked to mental health disorders, poor academic performance, and obesity.<sup>11,12</sup>

## **Substance Use and Risk Behaviors**

Alcohol, tobacco, and cannabis use often initiate during adolescence. Early initiation increases risk for addiction, mental health problems, and chronic disease later in life.<sup>13</sup> Risk behaviors often cluster: adolescents who smoke are more likely to consume alcohol, engage in sedentary behavior, and have unhealthy diets.<sup>14</sup>

## **Mental Health and Stress Management Behaviors**

Emotional well-being influences lifestyle behaviors. Stress, anxiety, and depression are associated with poor diet, sedentary behavior, sleep problems, and substance use.<sup>15,16</sup> Conversely, engagement in sports, mindfulness practices, and social support can promote healthier choices.

## **Determinants of Adolescent Health Behaviors**

Adolescent health behaviors are shaped by a complex interplay of factors operating across multiple levels, ranging from individual characteristics to broader social and environmental influences. Understanding these determinants is critical for designing effective interventions and policies aimed at promoting healthy lifestyles.

### **Individual Factors**

At the individual level, knowledge, attitudes, beliefs, self-efficacy, and intrinsic motivation strongly influence adolescents' choices regarding diet, physical activity, sleep, and substance use.<sup>17</sup> Adolescents who are aware of the benefits of healthy behaviors and confident in their ability to make positive choices are more likely to engage in physical activity, consume nutritious foods, and avoid risky behaviors. Mental health, stress levels, and cognitive development also play important roles, affecting decision-making and risk perception during adolescence.

### **Family and Parental Influence**

Families are key socializing agents that shape health behaviors during adolescence. Parental modeling of healthy habits, provision of nutritious meals, encouragement of physical activity, and monitoring of screen time and substance use significantly influence adolescents' lifestyle choices.<sup>18</sup> Supportive parenting that combines guidance with autonomy fosters self-regulation, while parental neglect, inconsistent supervision, or unhealthy modeling can increase vulnerability to risky behaviors.

## **Evidence-Based Interventions**

### **School-Based Interventions**

Schools provide structured platforms for health promotion. Multi-component interventions integrating nutrition

education, physical activity promotion, and mental health support have demonstrated effectiveness in improving diet and activity patterns.<sup>22,23</sup> Programs that involve teachers, parents, and community stakeholders achieve better outcomes.<sup>24</sup>

### **Mobile and Digital Health Interventions**

mHealth interventions using apps, social media, or text messaging show promise in influencing physical activity, dietary choices, and health monitoring. Personalized feedback, goal setting, and gamification can increase adolescent engagement.<sup>25,26</sup> Digital interventions also provide scalable approaches, especially in low-resource settings.

### **Family- and Parent-Focused Interventions**

Parental involvement enhances program effectiveness by reinforcing healthy behaviors at home. Parent-based programs improve nutrition, physical activity, and sleep among adolescents.<sup>27</sup> Family interventions are particularly effective when targeting multiple risk behaviors simultaneously.

### **Community-Based Approaches**

Community programs that provide safe spaces for sports, recreation, and peer support can promote healthy behaviors. Multi-level interventions addressing socio-economic barriers, accessibility, and social inclusion are most effective.<sup>28</sup>

### **Challenges in Promoting Healthy Behaviors**

Promoting healthy behaviors among adolescents is complex and influenced by a range of social, cultural, environmental, and structural factors. One of the primary challenges is the strong influence of peer pressure and prevailing cultural norms. Adolescents are highly susceptible to social influences, and behaviors such as unhealthy eating, sedentary habits, or early substance use can be reinforced by peers or normalized within the community, making sustained behavioral change difficult. Cultural beliefs and family practices may also conflict with evidence-based health recommendations, further complicating efforts to encourage healthier lifestyles.

The pervasive exposure to digital media and online content presents another significant challenge. While digital technologies can be harnessed for health promotion, excessive screen time, online marketing of unhealthy foods, and social media trends often encourage sedentary behavior and poor dietary choices. Adolescents may internalize unrealistic body ideals or adopt behaviors promoted by influencers that are inconsistent with health guidelines, contributing to psychosocial stress and unhealthy lifestyle habits.

Structural inequities further hinder the promotion of healthy behaviors. Disparities in income, access to recreational facilities, quality of schools, and availability of nutritious foods mean that interventions are often less effective among marginalized or disadvantaged populations. Adolescents in low-resource settings may face multiple barriers, including unsafe neighborhoods, limited transportation, and financial constraints, which restrict participation in physical activity and access to health-promoting programs.

Finally, implementing multi-component interventions that address individual, social, and environmental determinants requires substantial coordination, skilled personnel, training, and ongoing monitoring. Programmatic complexity, coupled with limited resources and fragmented health and education systems, can reduce the scalability and sustainability of interventions. Ensuring fidelity, cultural relevance, and community engagement adds further layers of challenge.

Addressing these challenges requires innovative, context-sensitive, and multi-level strategies that account for the diverse influences on adolescent behavior. Integrating family, school, peer, and community engagement, alongside policy support and digital health strategies, is essential for fostering sustainable, healthy lifestyle habits among adolescents.

### **Conclusion**

Adolescence and youth represent a critical window for establishing behaviors that influence lifelong health trajectories. During this period, lifestyle habits related to diet, physical activity, sleep, screen time, and substance use become increasingly established, often persisting into adulthood and shaping long-term risk for obesity, non-communicable diseases, and mental health challenges. Evidence indicates that unhealthy behaviors are widespread among adolescents and are frequently interconnected, with poor dietary habits coinciding with physical inactivity, excessive screen use, and inadequate sleep, further exacerbating health risks.

Addressing these challenges requires multi-level, integrated interventions that operate across schools, families, communities, and digital platforms. School-based health education, supportive family environments, safe recreational spaces, evidence-informed digital initiatives, and community engagement programs can collectively foster healthy behaviors. Complementary policy measures—such as regulations on unhealthy food marketing, urban planning for physical activity, and equitable access to health-promoting resources—are essential for creating an enabling environment that supports sustained behavior change.

Sustainable improvements in adolescent health also depend on continuous monitoring, evaluation, and adaptation of interventions. Equity-focused approaches

are particularly important to ensure that vulnerable and marginalized populations are not left behind, while culturally appropriate programming ensures relevance and acceptability across diverse contexts. By combining evidence-based interventions with supportive policies and inclusive strategies, stakeholders can effectively promote healthy lifestyles among adolescents and youth, reduce the burden of chronic diseases, and contribute to improved health outcomes across the life course.

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