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Description automatically generated with medium confidenceHealth and Wellness Research and Practice Brief

**Research and Practice Brief**



**What to do:** Read these highlights from research and practice, then mine them for things you can apply in your program.

**Why it matters:** Knowing what research says about health and wellness can help you inform stakeholders about the importance of changing daily practices. Research-based information can also point to ways to improve your program’s support for health and wellness among students, families, and staff members and provide information that can help you find new program partners or apply for funds to start or sustain a health and wellness initiative.

Now more than ever, parents rely on out-of-school time programs, like Nita M. Lowey 21st Century Community Learning Centers (21st CCLC) sites, as partners to support the healthy development of their children.

In 2014, 75 percent of parents believed that afterschool programs provided children with opportunities to be physically active and 63 percent believed that afterschool programs provided healthy beverages, snacks, or meals. In 2020, these numbers had increased: 85 percent of parents believed programs provided opportunities for physical activity, and 68 percent believed programs provided healthy beverages, snacks, or meals. These supports were especially valued by parents of color and low-income families (Afterschool Alliance, 2022).

Percentages of parents who felt factors were extremely important, by income:

|  |  |  |
| --- | --- | --- |
| **Factor** | **Low-Income Families** | **High-Income Families** |
| Physical activity | 54% | 52% |
| Snacks or meals | 48% | 36% |

Percentages of parents who felt factors were extremely important, by race/ethnicity:

|  |  |  |  |
| --- | --- | --- | --- |
| **Factor** | **Black** | **Latino** | **White** |
| Physical activity | 55% | 58% | 51% |
| Snacks or meals | 46% | 44% | 38% |

Afterschool programs also offer children opportunities to interact with their peers, develop positive relationships, make new friends, and practice important skills related to social and emotional learning (Durlak and Weissberg, 2013). In 2022, six in 10 parents expressed more worry about their child’s emotional well-being than before the COVID-19 pandemic. Overall, 58 percent of parents reported that opportunities for children to build life skills are extremely important, and this was an even greater priority for Black (67 percent), Hispanic (64 percent), and low-income (63 percent) families. Moreover, 82 percent of parents overall believed out-of-school time programs provide the opportunity to learn social and emotional life skills, such as the ability to communicate and work in teams (82 percent), build confidence (81 percent), learn responsible decision making (79 percent), and build positive relationships with caring adults and mentors (77 percent). Three in every four parents (75 percent) believed that afterschool programs reduce the likelihood that youths will engage in drug abuse and other risky behaviors, and 85 percent believed program participation reduces children’s unproductive screentime (Afterschool Alliance, 2022).

# Importance of Health and Wellness in Afterschool



# Sleep Has Power

People often take sleep for granted and imagine that they can “catch up” on lost sleep when needed. However, science is finding that sleep is one of the most important activities humans engage in. According to the National Heart, Lung, and Blood Institute (NHLBI), “Getting enough quality sleep at the right times can help protect your mental health, physical health, quality of life, and safety” ([NHLBI, 2022b](#_ENREF_21)).

Getting the right amount of sleep matters for everyone, but sleep deficiency can be especially harmful for children, who need sleep to properly grow and develop their bodies and brains. Children and teens who don’t get enough sleep have behaviors that adults may misunderstand — behaviors like mood swings, anger and poor impulse control, sadness or depression, or lack of motivation. They may have problems paying attention, get lower grades in school, get stressed easily, and engage in risky behaviors.

Getting enough sleep improves learning. It helps us focus and pay attention, make decisions, remember things, manage our emotions and behavior, and have better physical and emotional reactions.

How much sleep is enough? Here are general guidelines (NHLBI, 2022a):

* Newborns 4 to 12 months: 12 to 16 hours a day
* Children 1 to 2 years old: 11 to 14 hours a day
* Children 3 to 5 years old: 10 to 13 hours a day
* Children 6 to 12 years old: 9 to 12 hours a day
* Teens 13 to 18 years old: 8 to 10 hours a day
* Adults 18 years and older: 7 to 8 hours a day

Healthy, active children learn better, have fewer behavioral problems, and perform better academically (Healthy Out-of-School Time Coalition, 2018). Healthy eating and physical activity are associated with increased life expectancy, better quality of life, and lowered risk for many chronic diseases (Centers for Disease Control and Prevention [CDC], 2011). Unfortunately, most children in the United States do not get the nutritious food and physical activity they need every day. Fewer than one in four children between the ages of 6 and 17 participate in the recommended 60 minutes of physical activity every day (CDC, 2022a), and more than seven in 10 youths ages 5-18 consume more than the recommended amounts of added sugar, saturated fat, and sodium.

# Nutrition

A healthy diet, along with regular physical activity, reduces the risk for the top three causes of death in the U.S.: heart disease, cancer, and stroke (CDC, 2011). Current dietary guidelines for Americans indicate that a healthy, nutritious diet includes vegetables of all types, fruits, whole grains, dairy, protein, oils, and limited added sugars, saturated fats, and sodium (U.S. Department of Agriculture and U.S. Department of Health and Human Services, 2020). The average daily intake of fruits and vegetables in children and adolescents is well below recommended amounts, and 72-80 percent of youths eat more than the daily recommended amount of added sugar. Between 78 and 88 percent of youths consume more than the recommended amount of saturated fat, and 77-97 percent of youths consume more than the recommended amount of sodium.

****Poor nutrition in children is linked to obesity, which in turn is associated with heart disease, diabetes, asthma, depression, and stigmatization (Hartline-Grafton and Hassink, 2021). In the United States from 2017 to 2020, CDC estimates found that 19.7 percent of children and adolescents were obese, and the percentages were higher among Black and Hispanic children than in non-Hispanic white and Asian children. More adolescents from poor families were obese than adolescents from families not living in poverty (CDC, 2021a). Obesity in children is associated with the immediate physical health risks of high blood pressure, high cholesterol levels, and low tolerance of blood sugar changes. Children with obesity are at increased risk of cardiovascular disease and type 2 diabetes beginning in adolescence, and are more likely to experience psychological consequences, including depression and anxiety, as well as bullying, discrimination, and low self-esteem (CDC, 2011; Hartline-Grafton and Hassink, 2021).

# Family Engagement Matters

Family engagement in schools and out-of-school time programs can promote positive health behaviors among children and adolescents. For example, students who feel supported by their parents and caregivers are less likely to experience emotional distress, practice unhealthy eating behaviors, consider or attempt suicide, or disengage from school and learning ([Resnick, Harris et al., 1993](#_ENREF_24)). School and community efforts that promote health among students have been proven to be more successful when families are involved. When family members volunteer at their children’s school, the likelihood of their children initiating smoking decreases, and the likelihood of their children meeting the guidelines for physical activity increases (Ornelas, Perreira et al., 2007). School and youth program interventions that include a family engagement component have been shown to increase positive health behaviors such as improving children’s fruit and vegetable consumption and their school-related physical activity (Hawkins, Catalano et al., 1999).

To increase family engagement in health and wellness, schools and programs must make a positive connection with families, provide a variety of health and wellness activities, and schedule frequent opportunities to fully engage families in planned wellness activities. Supporting and engaging families can be done in a variety of ways. Offering parent education classes (e.g., importance of lifelong physical activity, talking with children about health-related risks and behaviors, monitoring children’s screentime activities), holding health-related events in the community (e.g., cooking classes, family fun runs, mobile vaccine clinics), and providing information to families on important health screenings for children (e.g., eye exams, hearing tests) are just a few examples (CDC, 2012).

A study in *JAMA Pediatrics* (Murray et al., 2022) found that children — both boys and girls — as young as 9 or 10 years old can suffer eating disorders. Researchers learned that about 5 percent of children suffered from binge eating behavior, and another 2.5 percent were trying to avoid gaining weight through self-induced vomiting. The study stressed that eating disorders affect all children, irrespective of age, race, or gender.

In 2020, approximately 12 million children (17.5 percent of all children) lived in food-insecure households. Black and Latino children were more than twice as likely to face food insecurity as non-Hispanic white children, and the COVID-19 pandemic increased food insecurity among rural and Black, Indigenous, and people of color (BIPOC) communities (Feeding America, 2022). Food insecurity, even at a marginal level, is especially detrimental to children’s health, development, and well-being (CDC, 2011; Hartline-Grafton and Hassink, 2021).

Quite a few children’s health issues have been linked to food insecurity. Beyond the obvious, such as poor health status, lower health-related quality of life, lower physical functioning, poor dietary quality, and less physical activity, other health issues include more frequent colds and stomachaches, asthma, lower bone density (among boys), tooth decay, developmental risk, behavioral and socioemotional problems (e.g., hyperactivity), mental health problems (e.g., depression, anxiety, suicidal ideation), and poor educational performance and academic outcomes (U.S. Department of Agriculture and U.S. Department of Health and Human Services, 2020).

Out-of-school time programs that teach and apply nutrition standards can improve children’s diet quality and food security, which may further support physical and mental health and learning. Federal nutrition programs such as the Child and Adult Care Food Program (CACFP) and the National School Lunch Program (NSLP) provide funding for afterschool snacks and meals, and school-aged children consume more fruits, vegetables, milk, and key nutrients like calcium, vitamin A, and folate on days they eat afterschool meals than on days they do not (Hartline-Grafton and Hassink, 2021). A healthy school nutrition environment offers students nutritious and appealing foods and beverages, consistent and accurate communication about good nutrition, and ways to learn and practice healthy eating throughout the time they spend in programming (CDC, 2022b).

# Physical Activity

Regular physical activity can play a major role in preventing chronic disease, improving physical fitness, reducing depression and anxiety, and promoting positive mental health. A healthy balance between a nutritious diet and physical activity is necessary to maintain a healthy body weight and prevent or reduce obesity. Substantial evidence indicates that physical activity can help improve concentration, attention, classroom behavior, and academic achievement (CDC, 2013). Given these important benefits, the CDC and Institute of Medicine emphasize out-of-school time programs, as well as physical activity clubs and intramural and extramural sports, as part of a comprehensive approach to increasing student physical education and physical activity (CDC, 2022b). Out-of-school time programs can provide opportunities for children and adolescents to increase daily physical activity, practice skills learned in school physical education programs, and try new activities in a safe environment (Springboard to Active Schools, 2022).

The Physical Activity Guidelines for Americans issued by the U.S. Department of Health and Human Services indicate that children and adolescents ages 6 through 17 need 60 minutes or more of moderate to vigorous physical activity daily (U.S. Department of Health and Human Services, 2018). This activity does not need to be a formally organized exercise program; activity may include walking to and from school, free play, organized games or sports, or structured programs. Recent estimates show that less than one quarter of youths participate in at least 60 minutes of physical activity every day (CDC, 2022a).

In 2011, the National AfterSchool Association (NAA) adopted healthy eating and physical activity (HEPA) standards for out-of-school time programs. These standards provide helpful benchmarks for snack content and quality, staff training, HEPA-related curricula, social support, program support, and environmental support. Developed by the Healthy Out-of-School Time (HOST) Coalition, the standards were extensively updated in 2018 by the HOST coalition with the National Recreation and Park Association and the Afterschool Alliance. The NAA HEPA standards recommend that physical activity should make up at least 10 percent of overall program time, and at least 50 percent of the activity time should be moderate or vigorous (HOST Coalition, 2018). High-quality physical activity programming offers developmentally appropriate and inclusive physical activities, games, and sports that provide youths with the knowledge and skills needed to enjoy staying physically active throughout their lives (National AfterSchool Association, 2018).

# Stress and Social, Emotional, and Mental Health

Health and wellness encompass more than physical health, supported through good nutrition and sufficient physical activity. Supports for social, emotional, and mental health are also essential to children’s well-being, and to the development and continuation of healthy habits. Children who struggle with obesity are more likely to also struggle with depression, anxiety, and low self-esteem, and emotional distress can lead to poor dietary choices and reduced activity (National Research Council and Institute of Medicine, 2009). Youths with poor nutrition and low activity levels need to feel comfortable trying and participating in new activities and lifestyle changes, and afterschool programs can provide caring adults and places where young people feel safe to try new activities. In these environments, students can learn to make healthy decisions in all areas of their lives, form positive relationships with peers, set goals for themselves, and feel empowered to take charge of their futures (Afterschool Alliance, 2018a).

Nearly half of U.S. children have experienced at least one adverse childhood experience (ACE). African American and Hispanic children are more likely to experience at least one ACE than non-Hispanic white and Asian children, and the most likely to experience two or more ACEs (Afterschool Alliance, 2018b). A Kaiser Permanente study has linked ACEs to increased risk of substance abuse, depression, and heart disease in adulthood (Felitti et al., 1998). Protective factors that lower the likelihood of these outcomes include children’s abilities to manage emotions, maintain healthy relationships, experience and show empathy, and develop healthy habits (Afterschool Alliance, 2018a). High-quality afterschool programming can help students to build these protective factors. Regular participation in such programming has been shown to improve student self-confidence, self-awareness, and positive social behaviors (Durlak, et al., 2010).

Recently, the COVID-19 pandemic and ongoing impacts of structural racism have placed communities, families, and children under prolonged stress (American Academy of Pediatrics, 2022). While some level of stress is unavoidable and can even help to produce growth, extended periods of stress can overwhelm the body’s ability to respond in a healthy way. When stress levels become toxic, they can impair brain growth and development and weaken the body, leading to problems with learning, behavior, and long-term health (Afterschool Alliance, 2020). In October 2021, the American Academy of Pediatrics, the American Academy of Child and Adolescent Psychiatry, and the Children’s Hospital Association together declared a National State of Emergency in Children’s Mental Health. Physical activity helps to decrease anxiety and emotional stress, and out-of-school time programs can implement additional approaches to reducing stress. Participation in evidence-based programs that take a social and emotional learning (SEL) approach is linked to reduced emotional distress and improved behavior, academic performance, self-perception, and attitudes toward school, teachers, and others (Taylor et al., 2017). In 2020, members of the 50 Statewide Afterschool Networks identified five key elements afterschool programs can offer to help buffer the effects of toxic stress: (1) supportive adult and peer relationships, (2) social-emotional learning, (3) safety and belonging, (4) youth voice and choice, and (5) promoting physical health (Afterschool Alliance, 2020).

# Academic Benefits and Conclusions

Student academic achievement benefits appear in studies conducted by the CDC Healthy Schools project. When asked to report on their grades and their health and wellness behaviors in 2019, high school students demonstrated that the following healthy habits can contribute to better outcomes (CDC, 2022b):

* Eat the following every day: breakfast, fruit or fruit juice, and vegetables. Don’t count french fries as vegetables and don’t drink soda every day.
* Engage in physical activity for 60 minutes a day and play on at least one sports team. Don’t sit in front of a TV or computer screen for more than three hours a day.
* Start using alcohol at a later age and consume it lightly and infrequently. Don’t use tobacco or other potentially addictive substances.
* Get eight or more hours of sleep every night and visit a dentist regularly.

When families, schools, and out-of-school time programs partner to help students learn and practice healthy behaviors, the payoffs are better health, higher academic grades, and greater stress resilience. It’s important to deliver clear, consistent messages to young people, encourage the development of positive health and academic behaviors, encourage valuing health and wellness practices, assist families with getting necessary preventive care, and improve access to resources and support networks (Youth.gov, n.d.).

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