



### Longer Lunch Periods in K-12 schools: Research Summary with References

Longer school lunch periods, especially longer seated lunch times, result in less food waste as well as improved student performance, cognitive function, physical health, and social/emotional health.

The Centers for Disease Control and Prevention (CDC) recommends at least 20 minutes of seated time for children to finish their lunches. However, less than 50 percent of U.S. school districts follow that recommendation (CDC, 2019). The School Nutrition Association recommends 25 minutes of lunchtime for elementary school students and 30 minutes for middle and high school students. This includes the time it takes to get into the lunchroom, wait in line for a meal, find a place to sit, eat lunch, and bring trays and other items to waste/recycling stations at the end of lunch. By the time some students get to their seats and open their food, their actual seated lunchtime often is down to 15 minutes or less (Wisely, 2019). In addition, younger students often require a longer time to eat due to an undeveloped sense of time or ability to manipulate food such as eating a whole apple.

#### **Physical health**

According to nutrition experts, 15 minutes or less is not enough time for children to properly eat and digest their food. When people have less time to eat or when they eat meals faster, calorie consumption increases. According to the U.S. Department of Agriculture (USDA), many unhealthy eating habits can be established during childhood, which has likely contributed to the current obesity epidemic.

Most children in the U.S. get 30 to 50 percent of their daily calories from the school lunch meal. An assessment of lunch seat-time in Seattle Public Schools found that schools with a higher student population eligible for free and reduced lunch provide less time to eat (University of Washington Nutritional science graduate students, 2015). The length of lunchtime significantly affects the health of children from low-income families since they rely on school meals for more than half of their energy intake.

Children often eat the food they like first, such as processed or sugary foods rather than vegetables. Processed foods and those containing sugar may be linked to sleep problems and

depression as well as childhood obesity. The childhood obesity epidemic in the U.S. is not only a physical health problem; it is closely related to mental health, self-esteem, and cognitive development (Hemmingsson, 2018).

The USDA set new nutrition standards for food served in public schools to include more fresh produce and whole grains (USDA, 2012). However, more nutritious food also takes more time to eat (Sparks, 2019). Although children are being served fresher, healthier foods, the overflowing lunch waste at the end of school lunches suggests students do not have time to digest the healthier lunches served under the Healthy, Hunger-free Kids Act (Godoy & Aubrey, 2015). A study from Harvard School of Public Health shows that students with more time to eat lunch (at least 25 minutes versus 20 minutes) had “a 13% decrease in entrée waste, 12% decrease in vegetable waste, and 10% decrease in milk waste” (Cohen, 2015).

### **Cognitive functioning / academic performance**

Research shows that healthy lunches not only make children’s bodies healthier, but the combination of nutrition and physical activity in a longer lunch period can improve academic performance (Cohen, 2016). As noted above, research shows that brain breaks can boost motivation (which is connected to academic performance) and improve mood (Yeager, 2018). Students who lack nutrients tend to be irritable and have difficulty concentrating, which can interfere with learning and academic performance (USDA 2015).

### **Cost**

The overall estimated national cost of K-12 lunch food waste is \$1.2 billion nationally. Longer seated lunchtime for K-12 students would decrease the cost of food waste from K-12 schools.

### **Emotional/social health**

Having enough time to eat lunch helps children develop their social skills; they can learn to listen, interact with others, and develop qualities such as empathy and understanding toward others. How meals are shared communicates basic notions of dignity.

In many K-12 schools across the U.S., the lunch environment has not been viewed to help meet students’ needs for community and socialization (Harrell, 2017). School lunch periods provide time for social and emotional development where students can build community and help each other (Sparks, 2019).

A higher level of cognitive functioning, such as impulse control and memory, is associated with a healthier diet (Writers, 2020). Lunchtime should be a time for students to relax, breathe, slow down, and de-stress from morning classes. Research shows that brain breaks can boost a student’s motivation and improve a student’s mood (Yeager, 2018).

Lunch should be a time when a child can develop friendships and feel connected and included by others. According to the U.K. Mental Health Foundation, having enough time to share meals with someone can evoke feelings of contentment and security (U.K. Mental Health, 2018). Relationships with others are essential for children’s self-esteem. When children have good friends, their sense of belonging increases and children learn to get along with other people

and sort out conflicts and problems. Research shows those important life skills lead to less social and emotional difficulties later in life (Life Foundation, 2020).

### **Examples with Promising Trends**

Although shorter lunches have been the trend in U.S. schools since 2009, some schools are giving children an additional five minutes for lunch.

Examples of extended lunch periods in the U.S.

1. Arundel High School in Maryland gives students a 50-minute lunch period to allow students to eat, socialize, and finish up homework. Students reported appreciation for the extra time to catch up with friends and get extra help they need from teachers. Principal Stratton said this change not only allows students to form a community but also can lead to less stress and higher grades (Gvozdias, 2018).
2. In Ogden City School District in Utah, students are rewarded with more extended lunch periods if they reduce the number of tardies and keep up with grades. Principal Briggs at Ogden High School reported that the number of tardies had been cut in half since the program began (Chen, 2019 ).

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