

## Impact of the Anchorage School District's Wellness Initiative and Recess Before Lunch Policies on School Meal Consumption

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### Summary:

The Anchorage School District (ASD) implemented a voluntary Wellness Initiative in the Fall of 2019. The Wellness Initiative included increasing the length of lunch periods and providing more opportunities for physical activity during the school day with longer recess and movement breaks. Unrelated to the Wellness Initiative, schools also had the ability to schedule recess before or after lunch. During the 2022-23 school year, six Wellness Initiative Schools and five control schools in ASD were randomly selected for an evaluation, which included measuring school meal consumption. The results of the evaluation found that in Wellness Initiative schools, students consumed significantly greater amounts of their entrée, grain side dish, and fruit. Across all schools, recess before lunch was associated with greater entrée, fruit, milk, and vegetable consumption. The greatest increases in consumption were observed when the Wellness Initiative was combined with recess before lunch. Overall, the results of this evaluation suggest that the Wellness Initiative and recess before lunch policies have strong potential to improve school meal consumption, reduce food waste in school cafeterias, and better support student nutrition.



## Background:

School meals play an important role in supporting children's nutrition, with many children receiving up to half their daily energy intake from school meals. However, there are currently no national standards regarding lunch period lengths, which can result in many students having insufficient time to eat. Additionally, while recess has traditionally been scheduled after lunch, schools are increasingly scheduling recess before lunch. However, little is known regarding if this impacts how much students eat in the cafeteria.

In the Fall of 2019, the Anchorage School District (ASD) introduced a Wellness Initiative, with elementary schools voluntarily opting to participate. The Wellness Initiative included increasing the length of lunch periods and providing more opportunities for physical activity during the school day. Specifically, Wellness Initiative schools were asked to provide students with 20 minutes of *seated time* in the cafeteria—typically achieved with a 30-minute lunch period—and a total of 54 minutes of physical activity each school day (corresponding to 90% of CDC recommendations). This included a minimum of 30 minutes of recess and 24 minutes of movement breaks throughout the school day on days when students did not have a physical education class. Schools that chose not to implement the wellness initiative typically had 20-minute lunch periods and 20-minute recess periods. Unrelated to the Wellness Initiative, schools also had the ability to schedule recess before or after lunch; this resulted in different recess schedules across the schools as well as within the schools (e.g., within a school, kindergarten could have recess before lunch while first grade could have recess after lunch).



## Methods:

During the 2022-23 school year, six Wellness Initiative elementary schools and five matched control schools within ASD were selected for a detailed evaluation (while there were originally six control schools, one dropped out because they were only able to serve shelf-stable school meals). Food consumption was measured using plate waste methods, which is the “gold standard” for measuring food waste in schools. First, before the lunch periods began, each food offered as part of the school meal was weighed. Then, at the end of the lunch period, trays collected and each leftover food item was individually weighed to calculate the percentage consumed. Differences in consumption between Wellness Initiative and control schools were analyzed using mixed-mode analysis of variance, adjusting for student grade level and day of collection.



*\*Percent consumed was calculated as:  $(\text{Pre-weight} - \text{Post-weight}) / \text{Pre-weight} \times 100$*

## Summary of Findings:

### In Wellness Initiative Schools (compared with control schools):

- Students consumed on average **16% more of their entrée.**
- Students consumed on average **27% more of their grain side dish.**
- Students consumed on average **20% more of their fruit.**
- While students in Wellness Initiative schools consumed an average of 7.0% more milk and 13.5% more of their vegetable, these differences were not statistically significant.

### Recess before Lunch (compared with recess after lunch)\*

- Students consumed on average **7% more of their entrée.**
- Students consumed on average **13% more of their milk.**
- Students consumed on average **9% more of their fruit.**
- Students consumed on average **4% more of their vegetable.**

\*Greater consumption of entrée, milk, and fruits—and consequently decreased food waste—were observed among schools with both the Wellness Initiative and recess before lunch.

### **Implication and Recommendations:**

The complimentary policies of the Wellness Initiative and recess before lunch have the potential to better support students' nutrition as well as reduce food waste in schools.

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