

Assessment of Elementary School Meals in Suburban Cook County, Illinois

Summary of Key Findings

1 Calories in an average SCC elementary school lunch exceed USDA national nutrition standards.

2 SCC students' participation in school meals varied by meal and school characteristics.

3 Meal consumption in the sample of SCC students varied by meal and item.



Introduction

Overweight and obesity among children is a major public health concern in suburban Cook County (SCC). A recent comparison between national and SCC overweight and obesity prevalence rates by grade specific age groups found SCC rates to be significantly higher. For example, 40% of 9th graders in SCC were overweight or obese compared to 32% of children in the U.S. Disparities in overweight and obesity prevalence are also found among regions within SCC where the West and Southwest regions have significantly higher rates.¹

Obesity is caused by long-term patterns of imbalance between calories consumed and calories burned. Good nutrition, along with physical activity, is important in preventing obesity. Maintaining a healthy weight includes limiting the number of excess calories consumed through calorie-dense, nutrient-poor foods, including foods high in fat and sugar.

Public school districts in SCC participate in the National School Breakfast and Lunch Programs, federally assisted meal programs administered by the U.S. Department of Agriculture (USDA). The USDA provides subsidies to school districts to support school meal programs that meet USDA requirements. School districts set meal prices and are reimbursed by the USDA for meals served. Students from low-income families qualify for free or reduced price meals.

Most U.S. school children consume school meals. School meal participation rates are generally higher among elementary school students, minorities and students from low-income households². Due to the high levels of student participation, school meals offer an excellent opportunity to address consumption of excess calories through reduced availability of high calorie, nutrient-poor foods and increased availability of lower calorie nutrient-rich foods, such as low-fat milk, whole grains, fruits and vegetables.

To better understand opportunities for school meal interventions that support obesity prevention, the Cook County Department of Public Health collaborated with the Consortium to Lower Obesity in Chicago Children at Ann and Robert H. Lurie Children's Hospital of Chicago to assess school meal content, student participation, likability, and consumption in a sample of 5th and 6th grade students in 13 SCC public elementary schools. This brief shares key findings and recommendations for future efforts.

Acknowledgements

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What was done

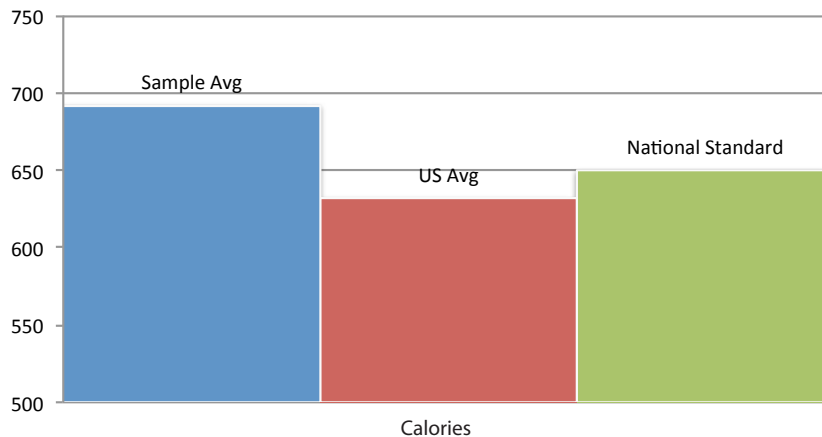
Student school meal participation, likability and consumption data were collected from 1,086 students in two 5th and/or 6th grade classrooms from each of 13 participating SCC public elementary schools. Using a student school meals questionnaire, data were collected once in school year 2010-11 and again in 2011-12. Data from the questionnaire were highly correlated with school meal sales reported by school food service coordinators. Additionally, nutrition information for each lunch meal served over a one-month period of each school year was collected for each school in the sample.

1 Key Finding

Calories in an average school lunch served at SCC elementary schools in our sample exceeded USDA national nutrition standards for elementary school lunches³.

- ▶ The average SCC school lunch served at schools in our sample has 692 calories; the current national nutrition standard is 550-650 calories for elementary school lunches.

Chart 1 | Comparison of Average School Lunch Calories



2 Key Finding

School meal participation in the sample of SCC students varied by meal and school characteristics.

- ▶ Participation in school lunch is significantly higher than for breakfast. In our sample, the participation rate for school breakfast was 37%, which is the same as the national rate. School lunch participation rates among students in our sample are higher than of the national average – 85% vs. the national rate of 63%. However, it is known that elementary school children have higher school meal participation rates². Since our sample included only elementary-aged students, it is likely that overall student participation rates in SCC are lower.
- ▶ Similar to national trends, schools with large minority student enrollment in the sample (>70% non-Hispanic Black or Hispanic) had higher school meal participation rates – 67% for breakfast and 94% for lunch. The higher student participation rates in these sampled schools increases the likelihood that improvements to school meals in these settings will have greater impact by reaching more students.

3 Key Finding

Meal consumption in the sample of SCC students varied by meal and item.

- ▶ 43% of students in our sample reported consuming half or more of breakfast.
- ▶ 61% of students in our sample reported consuming half or more of lunch.
- ▶ 30% of students in our sample reported eating more than half of vegetables served at either breakfast or lunch – the lowest consumption rate for items we tracked.
- ▶ 60% of students in our sample reported eating more than half of fruits served at either breakfast or lunch – the highest consumption rate for items we tracked.

Recommendations

Schools can play an integral role in improving student health. Because participation is so high, school meals provide a means to offer lower calorie, nutrient-rich foods to many students. The findings point to three key areas for efforts to improve student diets through school meals.

Increase Student Participation

Increased participation in school meals is desirable because, generally, while school meal nutritional qualities need improvement, they offer superior options compared to other available options including lunches brought from home². For example, a USDA study found that students participating in school lunch eat twice as many servings of vegetables as those not participating in school lunch². Furthermore, students who do not participate in school meals programs are more likely to purchase competitive foods, which typically are of lower nutritional quality than school meals³. Additionally, in some studies, participation in school breakfast has been associated with reduced obesity³.



Student participation is also important to ensure the financial stability of the school meal programs and increase local school districts' capacity for including items with higher nutritional quality. The USDA reimburses school districts per meal served. Economies of scale dictate that larger volumes of meals served can be cost effective and enable schools to afford to serve higher quality foods. Therefore, increasing participation can make improving the nutritional quality of school meals more sustainable at the local level³.

Participation in school breakfast among is much lower than participation in school lunch, and the amount of the breakfast meal consumed is lower than for lunch among students in our sample. Consumption of breakfast is important for student health, academic performance and obesity prevention⁴. Given this, working to increase participation and consumption can have a beneficial impact on the health and wellness of students in SCC.

In schools with high minority populations, a primary challenge may be to increase breakfast participation, as lunch participation is already very high. Challenges to breakfast participation include logistics such as requiring students to arrive at school early and increased staffing needs. Some schools have overcome these issues with Universal Breakfast programs offered to all students in classrooms at the start of the school day.

Reduce Calories in School Meals

Currently, the average school lunch meal served by SCC schools in our sample exceeds the national standard for calories. Aligning school lunch meals with this standard would assist in efforts to reduce excess calories in the diets of our children.

Suggested nutrition guidelines can be found on the websites of

- ▶ Alliance for a Healthier Generation at <http://www.healthiergeneration.org/schools.aspx>
- ▶ HealthierUS School Challenge at <http://www.fns.usda.gov/tn/HealthierUS/index.html>

Increase Appeal of Healthier Items

In terms of meal item specific improvements, our findings suggest school food service operations should focus on improving the appeal of vegetables served as they are the meal component least likely to be consumed by students and are typically low in calories and nutrient dense, making them a good choice for improving dietary quality. Further, the majority of students in our sample report consuming all or most of fruits served in school meals. This is an area of success, and efforts to maintain this consumption should continue.

References

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