

# IMPACTS OF CAFETERIA REDESIGNS

School cafeteria redesigns improve high schoolers' attitudes toward school lunch and increase their participation.

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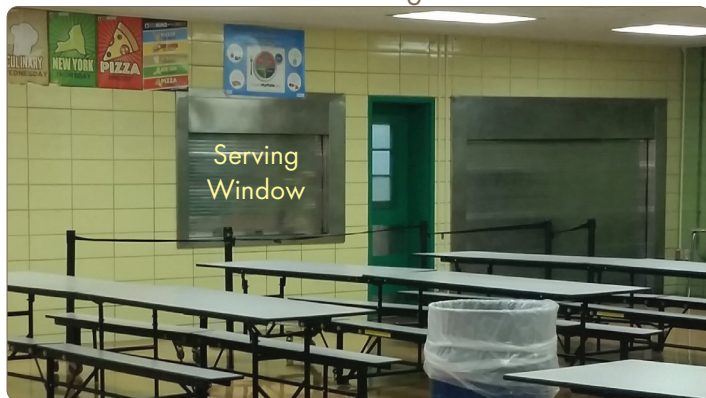
## NYC Invests in Cafeteria Redesigns

In New York City, 1 in 4 children are at risk of experiencing hunger in a given year.<sup>1</sup> The National School Lunch Program (NSLP) is a vital program to address childhood hunger and prevent chronic disease. Eating healthier school lunches leads to improvements in nutrition status, attendance, and cognitive functioning.<sup>2</sup>

To reduce disparities in health and educational outcomes, it is imperative that we promote healthy, nutritious meals for our most vulnerable populations. However, participation in NSLP remains low, especially among middle and high school students.<sup>3</sup> To improve participation rates and the overall aesthetic of cafeterias, the New York City Department of Education (NYCDOE) invested \$20 million to redesign 26 middle and high school cafeterias.

These redesigns, known as the School Transformation and Redesign of Cafeterias (STARCafé) began in three cafeterias in 2017. STARCafé included changes to the **serving line**, **dining area**, **aesthetics**, and **signage**, based on the *Healthy Eating Design Guidelines*.<sup>4</sup> The redesign came with a new menu called the “food court” menu, which had daily offerings including sandwiches, entrée salads, and “fast food,” such as pizza and fries in addition to a daily rotating hot entrée.

Pre-redesign



## Study Overview

The Tisch Food Center conducted a case study of three STARCafé cafeteria redesigns to evaluate the effects of the changes on school lunch participation, consumption, and attitudes at 3 and 12 months after the redesign. Additionally, the Center assessed the changes for fidelity to the *Healthy Eating Design Guidelines*.<sup>4</sup>

### Features of STARCafé Redesigns

- **Serving line:** Serving lines were changed to open, choice-based lines, where students chose from a variety of pre-plated options.
- **Dining area:** New tables and chairs were added, including booths, coffee tables, and sofas.
- **Aesthetics:** Wall decor was updated with school names, mascots, themes, and mission.
- **Signage:** New educational and promotional signs featured messages about nutrition and menu options. Wayfinding signs were also added.

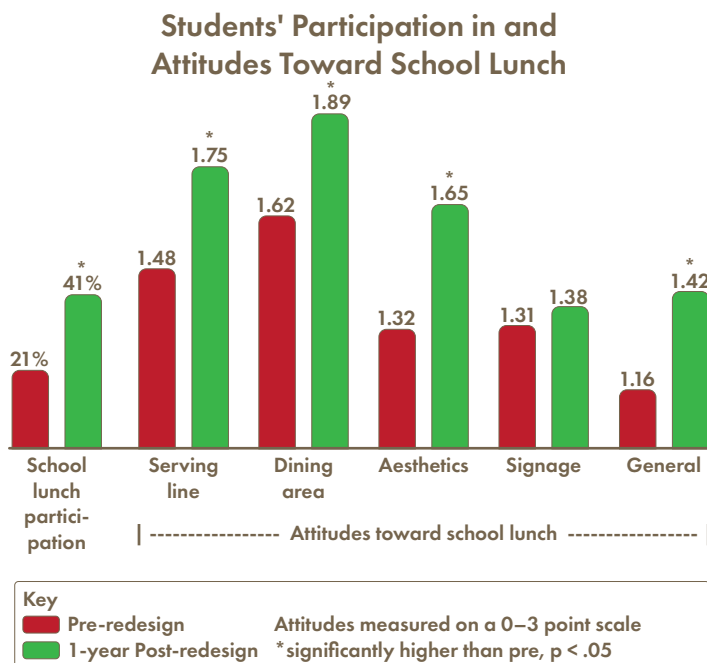
Post-redesign



## Results

The actual time students had to eat increased from 13:25 minutes before the redesign to 15:22 minutes a year later, nearly a two-minute increase. Participation rates in school lunch had a statistically significant increase, from 21% before the redesign to 41% a year later, according to data received from the NYC Office of Food and Nutrition Services.

Students' attitudes towards school lunch also statistically significantly improved, as shown below. This is an important finding as attitudes towards school lunch can be a significant predictor of lunch participation.<sup>5</sup>

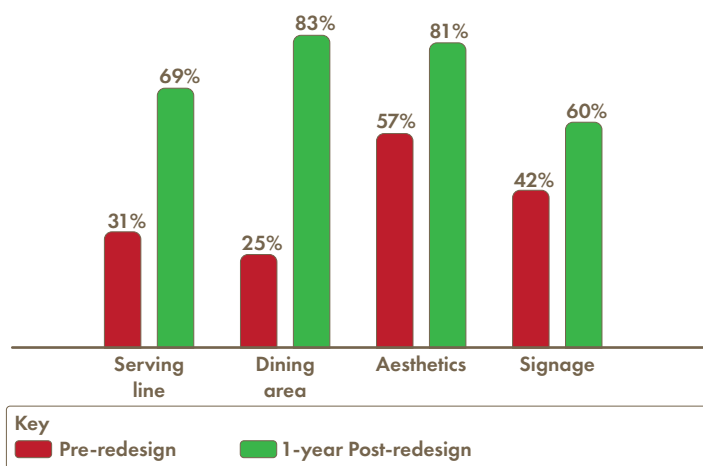


What students ate for the basic school meal components of protein, grain, fruits, vegetable and milk was about the same before and a year after the redesigns. Thus, while more students were participating in school lunch, students who had a tray were eating about the same amount.



Finally, researchers considered how well the STARCafé renovations aligned with the *Healthy Eating Design Guidelines*. These guidelines highlight theory-based strategies to optimize school environments, promoting academic success and healthy behaviors.<sup>4</sup>

### Cafeterias Meeting the Healthy Eating Design Guidelines



### More Research and Investment is Needed

This study highlights the potential impact of school cafeteria redesign on student participation in and attitudes towards school lunch. To optimize the impact of cafeteria changes, redesigns should be paired with healthier meal options. Additional research and investment are needed to further understand how different types of cafeteria redesign may impact student behavior and perceptions.



## References

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