

Research Rundown

Article:

Serving Vegetables First: A Strategy to Increase Vegetable Consumption in Elementary School Cafeterias

What did this study examine?

The objective of this study was to determine if offering vegetables prior to other meal components in the school lunch line would increase the overall consumption of vegetables for students in Kindergarten-5th grade.

How was the study conducted?

During intervention days, all students in the lunch line were offered pre-portioned amounts (3-4 pieces) of peppers prior to reaching the buffet area, where the peppers were offered once more. Students were told that they could consume the pre-portioned vegetable prior to reaching the buffet area.

How was the consumption of vegetables assessed?

The weight of the peppers consumed by each individual student was calculated for each study day. The weight consumed *per student eating school lunch* was then calculated by dividing the total amount of consumed vegetables across all students by the total number of students eating lunch.

Key Findings:

1 Acceptability of vegetables

- The mean number of students taking peppers increased **669%** from an average of **45** students (8%) on the two control days without vegetables first, to an average of **346** students (65%) on the three days with vegetables first.

2 Individual consumption of vegetables when served first

- Intervention days showed an increase in consumption of peppers by weight (mean **4.1 g** per each child eating school lunch) when compared to days when peppers were not served first.

3 Total consumption of vegetable on days when served first

- Overall consumption of vegetables was greater on intervention days when compared to control and/or follow up days (mean **5.4g** vs **4.0 g**).

Put it into practice!

- While students are waiting in line, offer small samples of known or unknown vegetables first before they receive their lunch. You can use this method with any food item, not just vegetables!
- When introducing a new menu item, holding a "taste test" by providing students with a small portion of the new item before reaching the serving line may increase the likelihood of them taking it.
- Try holding taste tests regularly in order to increase your students' interest in new menu items, or existing menu items that may need a resurgence in your lunch room.

Reference:

Elsbernd, S., Reicks, M., Mann, T., Redden, J.P., Mykerezi, E., & Vickers, Z.M. (2016). Serving vegetables first: A strategy to increase vegetable consumption in elementary school cafeterias. *Appetite*, 96, 111-115.



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