

Research Rundown

Article:

The addition of spices and herbs to vegetables in the National School Lunch Program increased vegetable intake at an urban, economically-underserved, and predominantly African-American high school

What was the purpose of this study?

The purpose of this study was to determine whether adding spices/herbs to vegetable recipes served to high school students through the NSLP is an effective dietary intervention to increase vegetable consumption and reduce food waste from vegetables.

Study Design

Phase 1: Stakeholder engagement and vegetable recipe sensory testing

A voluntary after school program was implemented in which students and staff were provided with nutrition education and sensory evaluation of 2-4 vegetable recipes per session. The recipes with spices/herbs were rated and 7 different vegetable recipes were selected for lunch service in Phase 2.

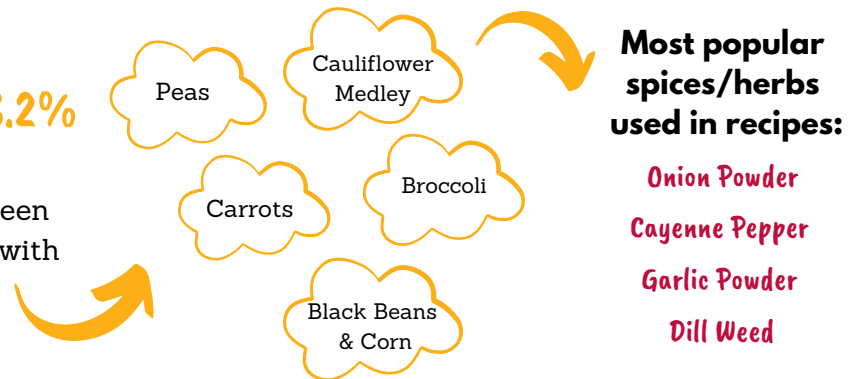
Phase 2: Comparison of vegetable intake with and without spices and herbs

Vegetable intake took place during two different 4-week periods in the fall and spring semesters. Typical vegetable recipes and vegetable recipes with spices/herbs were served separately during the 4-week period. Weighted plate waste was used to assess consumption of vegetables.

Key findings:

Total vegetable consumption increased by **18.2%** when prepared with spices/herbs.

The greatest increases in consumption were seen with the following vegetables when prepared with spices/herbs:



Put it into practice!

- Consider incorporating spices/herbs into your typical vegetable recipes in order to increase vegetable consumption.
- Create a student volunteer group, a "Lunch Bunch", to taste test recipes before serving them to your student body.
- Get students excited about the change and increase vegetable consumption by using your Lunch Bunch to market the recipe change to the student body.

Reference:

D'Adamo, C. R., Parker, E. A., McArdle, P. F., Trilling, A., Bowden, B., Bahr-Robertson, M. R., & Berman, B. M. (2020). The addition of spices and herbs to vegetables in the National School Lunch Program increased vegetable intake at an urban, economically-underserved, and predominantly African-American high school. *Food Quality and Preference*, 88, 104076.