FRESHFARM FoodPrints Impact

More consumption of plant-based meals in school lunchrooms, greater preferences for fruits and vegetables, bolstered standards-based education in DC Public Schools, and high value by families

More consumption of plant-based meals in school lunchrooms

Class to Cafe is associated with more consumption of school meals.

Students in schools with Class to Café programming ate, on average, 42% more of the portion size of the FoodPrints-WITS entrée and side salad than students attending schools without Class to Café programming.

Class to Café is a comprehensive food education initiative that integrates garden and nutrition education with systems change in school cafeterias through a partnership between FRESHFARM FoodPrints, Wellness in The Schools (WITS), and DC Public Schools. The initiative engages preschool through 5th grade students in monthly, hands-on, in-school field trips that integrate gardening, cooking, eating, and academic content aligned with grade-level curriculum standards.



In spring 2019, FoodPrints partnered with researchers from George Mason University and Columbia University to examine whether students who are exposed to FoodPrints-WITS programming were more likely to eat a larger share of the portion size of FoodPrints meals in the cafeteria than students in schools that did not have this programming. The results of this study demonstrate that:

- The Class to Café Project is associated with more consumption of the entrée and side salad portions of FoodPrints meals served in the cafeteria. Students participating in FoodPrints-WITS programming are significantly more likely to consume a larger share of the portion size of FoodPrints meals during school lunch, on average, compared to students in schools without this programming.
- The FoodPrints-WITS recipe combinations are a **favorable meal composition:** students at all schools ate the different components evenly (grain, protein, and vegetables), suggesting that the way the meals were created (with the three components mixed together) could be a helpful strategy in promoting vegetable consumption in school cafeterias.

(Kerstetter, Katie. 2019. "Farm to School Cafeteria Transformation Evaluation: School Year 2018-2019." Evaluation Report submitted to FRESHFARM and DC Public Schools.)

FRESHFARM FOODPRINTS

Greater preference for and willingness to eat fruits and vegetables, and greater knowledge of food production and environmental stewardship

Students in FoodPrints schools report greater willingness to try fruits and vegetables and greater preference for eating fresh produce.

Students at FoodPrints-WITS schools are more likely to report positive preferences for vegetables than students at schools without this programming.

Students attending FoodPrints-WITS schools are significantly more likely to state that they like sweet potatoes, kale, beets, lettuce, and radishes a lot, compared to students at comparison schools. Specific data showed 62% of students at FoodPrints-WITS school reported liking kale a lot, compared

to 17% of students at comparison schools, and 37% of students at FoodPrints-WITS schools reported liking beets a lot, compared to 10.4% of students at comparison school. (Kerstetter 2019)

The FoodPrints program is a "feasible and sustainable" program model for contemporary nutrition education.

An observational study by George Mason University researchers in the 2015-16 school year documented what is being learned and accomplished in FoodPrints classrooms as:

- Knowledge of dietary health
- Enriched Science, Social Studies, Language Arts and Math curriculum learning
- Appreciation and consumption of nutritious food
- Promotion of social cohesion and shared focus through the ritual of taking the first bite together

The study's author concluded that "There was ample evidence of program goals being realized.... Lessons focused on nutritional health aimed to concretize concepts that might otherwise be beyond the reach of elementary school children and provided information of practical importance that may improve students' dietary health in the long-term."

"FoodPrints is an important change agent, helping to positively frame children's relationship to food, shape schools' capacity for nutrition education, and support the broader academic mission of DC Public Schools." – Dr. Amy Best, George Mason University

(Best, Amy L. and Alexis Lahr. 2016. "FRESHFARM FoodPrints Program Evaluation." Unpublished Evaluation Report submitted to FRESHFARM.)

FoodPrints Impact





Bolster for standards-based education in DC Public Schools

DCPS administrators and teachers highly value FoodPrints in their schools. DC Public Schools administrators and teachers report that FoodPrints is an important partner in meeting school goals, and supporting academic and social emotional learning.

When DCPS classroom teachers in FoodPrints partner schools were asked to evaluate FoodPrints:

- 86% rated the academic support FoodPrints provides to their students as important.
- 75% said that family engagement through FoodPrints is important for their school.
- 89% said that the school garden is important to their students.
- 97% said that the nutrition education provided by FoodPrints is important for their students.
- 91% reported that FoodPrints' support for socio-emotional development is important for their students.



Principals in FoodPrints partner schools reported:

"FoodPrints supports student inquiry, connection to the natural world, and engages students in the process of critical thinking about the produce and foods they interact with. Students take pleasure in learning and show positive attitudes towards different foods and learning."

"FoodPrints provides unique opportunities for students to engage in collective work and responsibility, negotiating peer relationships. It transcends many invisible boundaries."



"Our FoodPrints teacher has embedded professional development by modeling for the classroom teacher STEM, nutrition, and gardening education."

As added strong statements of support, schools continue their financial investment and commitment to integrating the program in their school year to year, and more than 10 additional schools have expressed desire for FoodPrints partnership, if funding were available.

(Results from surveys of 10 principals and 140 teachers at 12 FoodPrints partner schools, spring 2018.)

Highly valued by families

Anecdotal evidence over several years and all partner schools families demonstrate that families place high value on FoodPrints programming in their schools.

In letters of support during winter 2019-20, from parents and students from across the city shared their enthusiasm for the program and why FoodPrints is important at school and for their family:

"FoodPrints is an important program at my school because this rich activity helps support healthy eating habits, encourages the importance of sustainability, and provides a beautiful cross-curricular bridge between science in our classroom and the thoughtful FoodPrints lessons." – Jaime Wolf, parent and teacher at School Without Walls at Francis Stevens



"Foodprints helps us connect with the world and each other, and inspires us to be the chefs, gardeners, and environmentalists of tomorrow." – Intan Fadzullah, parent at School Without Walls at Francis Stevens

"When I volunteer in FoodPrints classes, I see: excited kids; supportive parents; fresh produce being washed and chopped by small and careful hands; hand-drawn journals full of plants and recipes; children eating at tables they have set with dishes they have helped cook; and children

honing their skills in teamwork, sharing, problem-solving, and self-regulation." – Alina Baciu, MPH, parent at School Within School

"Students practice math skills by measuring; social studies skills by learning the history of food; ELA skills by speaking and listening; and science by learning about gardening, plants, and the environment. They practice and reinforce skills in a very authentic way." – 5th grade teacher at Beers

"Food Prints is one of those few experiences that does a great job of blending so many pieces of the puzzle – academics, social interaction, and emotional skills." – Lona Valmoro, parent at Watkins

It's an experience unlike any other in their day where they are learning using ALL of their senses... It's not only the fact that my child will "try the kale salad" it's that she takes an interest in what she's putting into her body, can identify it and even what season it may be grown. I think this class makes a lifelong impact. – *Caitlin LaRocco, parent at Peabody Early Childhood*

"When we were eating all these foods and trying them as a family. We show each other kindness and show we can work with each other. I know we are safe in FoodPrints." – student at Langley

Preliminary research with family members at three FoodPrints partner schools indicates that **FoodPrints can influence children's and family members' knowledge, willingness, and ability to eat fresh, healthy food**. Some parents who participated in focus groups and surveys reported that FoodPrints increased their child's enthusiasm for fresh fruits and vegetables, while others said the program allowed their child to share their enjoyment of fruits and vegetables with their peers. There is also evidence that FoodPrints has introduced families to produce they were unfamiliar with and encouraged some families to incorporate more fruits and vegetables into their diet.