

THE BENEFITS OF FARM TO SCHOOL

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NATIONAL FARM to SCHOOL NETWORK

GROWING STRONGER TOGETHER

National Farm to School Network is as an information, advocacy and networking hub for communities working to bring local food sourcing, school gardens and food and agriculture education into school and early care and education settings.

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What is Farm to School?

Farm to school enriches the connection communities have with fresh, healthy food and local food producers by enhancing food purchasing and education practices at schools and early care and education sites. Farm to school, inclusive of farm to early care and education, empowers children and their families to make informed food choices while strengthening the local economy and contributing to vibrant communities. Farm to school implementation differs by location but always includes one or more of the following three core elements:

Procurement: Local foods are purchased, promoted and served in the cafeteria or at meal times, as a snack or in classroom taste-tests.

Education: Students participate in education activities related to agriculture, food, health and nutrition.

School gardens: Students engage in hands-on, experiential learning through gardening.

Why Farm to School?



KIDS WIN

Farm to school provides all kids access to nutritious, high-quality, local food so they are ready to learn and grow. Farm to school activities enhance classroom education through hands-on learning related to food, health, agriculture and nutrition.



FARMERS WIN

Farm to school can serve as a significant financial opportunity for farmers, fishers, ranchers, food processors and food manufacturers by opening doors to an institutional market worth billions of dollars.



COMMUNITIES WIN

Farm to school benefits everyone from students, teachers and administrators to parents and farmers, providing opportunities to build family and community engagement. Buying from local producers and processors creates new jobs and strengthens the local economy.

Benefits of Farm to School



Economic Development



Public Health



Education



Environment



Equity & Community Engagement

Economic Development

Job Creation and Economic Activity

- Creation and maintenance of jobs in the community and in the state:
 - Case study models demonstrate for every job created by school districts purchasing local foods, additional economic activity creates another 0.27 – 2.35 jobs in the economic impact area.¹⁻⁴
- Increase in economic activity in the local community and in the state.¹⁻⁷
 - Each dollar invested in farm to school stimulates an additional \$0.60-\$2.16 of local economic activity, in one case resulting in \$1.4 million overall contribution to the state. 1,2,4
- Strengthen connections within the state's food economy.⁴
- Increase in money kept in the local economy, as farm to school producers purchase more inputs locally.^{2,5,7}

School and District Economic Benefits

- Increase in student and teacher meal participation from 1.3 percent to 16 percent (average +9 percent), generating increased revenue for schools through meal programs. 5.8-11
- Decrease in school meal program costs by utilizing school or district grown products.¹²

Producer and Food System Impacts

- Increase in income from farm to school sales and establishment of a long-term revenue stream for individual farmers.^{3,10,13}
- Increase in number of vendor and producer relationships and diversity of methods of procurement used by schools.³
- Increase in market diversification and economic growth opportunities for farmers, including forward contracting, and exploration of processing and value-added product creation for institutional markets. 1,2,10,14,15
- Increase in social capital and positive relationships for farmers with school districts, families and community members. 1,10,12,16,17

Public Health

Student Food and Nutrition Knowledge, Attitudes and Behaviors

- Improvement in early childhood and K-12 student health behaviors, including:
 - choosing healthier options at school meals;^{10,13,18-22}
 - consuming more and a greater variety of fruits and vegetables through farm to school meals and at home (+0.99 to +1.3 servings/day);^{10,19-21,23-31,31-39}
 - decrease in preference for and consumption of less healthy foods and sodas; 18,34,37 and
 - increasing physical activity.^{25,30}

- Demonstrated willingness to try new foods and healthier options (in early childhood and K-12 age groups). 20,22-24,28,34,35,39-43
- Increased preference for fruits and vegetables. 21,30,33,34,38,40
- Improved knowledge and attitudes regarding food literacy, nutrition, health behaviors, and fruit and vegetable consumption.^{5,18-23,27,38,41,43-45}
- Increase in fruit and vegetable consumption among those with the lowest previous intake.⁴¹
- Increase in fruit and vegetable intake associated with all core elements of farm to school.
 - When schools offer school gardens, 44.2 percent of students eat more fruits and vegetables;²⁹
 - When schools serve local food, 33.1 percent of students eat more fruits and vegetables;²⁹ and
 - When students participate in hands-on, food-based activities, students triple amount of fruit and vegetable consumption.⁴⁶
- Long-term impact on health behaviors: Increase in willingness to try and increased consumption of fruits and vegetables at college age due to gardening exposure at a young age.⁴⁷
- Potential to minimize diet-related diseases in childhood, such as obesity and diabetes, through the promotion of eating fresh fruits and vegetables, specifically for high-risk, low-income students.^{5,28}

Healthier School and Early Care and Education Food Environments

- Support in achieving and adhering to wellness policies in early care and education setting and K-12 schools.^{43,48-50}
- Improvement in food service operations to support healthy outcomes, such as increased cafeteria offerings of fruits and vegetables.^{19,41,46,51}
- Higher nutrient content in meals offered and foods consumed in early care settings.⁵²

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Family and Community Food and Nutrition Behaviors and Access

- Increase in access to fruits and vegetables.^{19,53-55}
- Increase in planning and preparing meals at home.⁴²
- Increase in ability and interest in incorporating healthier foods into family diets and guiding children in early childhood and K-12 to make healthier choices. 10,43,52
- Positive changes in shopping patterns reflecting healthy and local foods, including knowledge of where to purchase local foods.^{10,34,43,54}
- Increase among young children in asking their families to make healthier purchases. 33,43,56
- Improvement in household food security and food access. 4,12,53,54,57

Education

Student Engagement and Whole Child Development

- Increase in school engagement and positive attitudes about school and learning. 12,30,37,58-60
- Provides children with opportunities for social and emotional growth; improves life skills, self-esteem and sense of self, social skills and behavior, 5,32,34,42,45,58,59,61,62
- Greater opportunity for necessary experiential and hands-on learning.62-64
- Supports school readiness in young children. 61
- Encourages low-income students and students of color to engage in food and environmental issues in their communities. 63

Academic Achievement

- Increase in knowledge in science and STEM concepts (in early childhood and K-12 settings). 11,12,30,42,61,62,65,66
- Provides children with an understanding of gardening, agriculture (growing cycles, seasonality), local foods and the environment. 12,30,34,38,39,48,62,65,66
- Enhanced overall academic achievement in K-12 settings, including grades and test scores. 30,32,63
- Increased opportunity for innovative teaching platforms for core subjects, such as science, math and language arts in early childhood and K-12 settings. 30,34,61,62

Family, Educator and Staff Engagement

- Positive changes in educators' diets and lifestyles.34
- Positive educator and caregiver attitudes about integrating farm to school related information in curriculum and intention to implement farm to school activities in the classroom. 34,67,68
- Increase in parent acceptance of farm to school programs as their children demonstrate healthier behaviors such as increased fruit and vegetable consumption. 50, 54
- Increased parent engagement in early care and education and K-12 educational opportunities. 34,42,62
- Improvements in food service staff motivation and morale; increase in knowledge and interest in local food preparation and seasonal recipes; increase in interactions with teachers to strengthen classroom and cafeteria connections.38
- Opportunity to align purchasing practices with values. 17





Environment

- Reduced food waste of local food, both on the production side as well as plate waste; decrease in overall food waste due to farm to school activities. 9,28,69,70
- Reduced transportation-related environmental impacts, such as emissions of air pollutants. 6,7,28,71
- Support of environmentally sound, sustainable and socially just approaches to food production, processing, packaging, transportation and marketing.7,17,34

Equity and Community Engagement

- Influence neighboring communities to start or expand farm to school initiatives.72
- Improved support and acceptance of healthier school and early care and education meals among parents and the community.34,73
- Promotes positive linkages between schools and communities, particularly in low-income communities and communities of
- Increased student appreciation for and knowledge of diverse cultures and customs as well as engagement of diverse families in school activities.74
- Increase in opportunities to combat racial and economic inequities in the school food system.75
- Begins to reduce racial and social inequities in educational opportunities through access to experiential learning, resulting in higher student test scores.63
- Promotes environmental equity and links concepts of sustainability to social justice. 60,63

Summary of Farm to School Benefits

Population	Reach	Benefits	
Students			
Fruit and vegetable consumption	Increased +0.99 to +1.3 servings per day	- Public Health	c ()
Physical activity	Increased physical activity	- Public Health	C D
Health	Minimized risk of childhood obesity and diet-related diseases such as diabetes	- Public Health	()
Food system awareness	Increased knowledge about gardening, agriculture, healthy food, local food, seasonality	- Public Health - Education	
Food choices	Willingness to try new and healthy food; choosing healthier options in the cafeteria and at home	- Public Health - Education	
Academic achievement	Overall improvement in both grades and test scores (K-12)	- Education	
Social-Emotional Wellbeing	Improved life skills, self-esteem, social skills and other types of personal growth	- Education	
Advancing Equity	Reducing health and educational inequities among low-income communities and communities of color; leveraging community engagement in environmental issues	- Public Health - Equity & Community Engagement	
Schools			
Meal participation	Average increase of 9% (range 3% to 16%)	- Economic Development - Public Health	
Meal cost	Lowers school meal program costs	- Economic Development	(3)
School food environment	Increased offerings of fruits and vegetables; positive cafeteria atmosphere; school wellness policy adherence	- Public Health	
Food service staff	Improved morale; increased knowledge of local food	- Education - Equity & Community Engagement	
Educators	Positive diet and lifestyle changes; greater intent to integrate farm to school activities in the classroom	- Public Health - Education - Equity & Community Engagement	
Learning opportunities	Greater opportunity for hands-on, active and experiential learning opportunities	- Public Health - Education	
Farmers and Producers			
Income	Average increase of 5%	- Economic Development	
Markets	Increased diversification and new opportunities	- Economic Development - Community Engagement	
Families and Communi	ty Members		
Local economy	\$0.60-\$2.16 economic activity generated for every \$1 spent	- Economic Development	(3)
Job creation	Each new farm to school job contributes to the creation of additional 1.67 jobs	- Economic Development - Equity & Community Engagement	
Parents and families	Increased food security and positive diet changes; increased	- Public Health	th ran
	student participation in meals at home	- Equity & Community C Engagement	My South



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