THE BENEFITS OF FARM TO SCHOOL

What is Farm to School?

Farm to school enriches the connection communities have with fresh, healthy food and local food producers by changing food purchasing and education practices at schools and early care and education sites. Farm to school 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, 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**
- **Community Engagement**

Updated April 2017
Economic Development

Job Creation and Economic Activity
- Creation and maintenance of jobs in the community and in the state; for every job created by school districts purchasing local foods, additional economic activity creates another 1.67 jobs.40-55
- Increase in economic activity in the community and in the state.40,49,50,55
- Each dollar invested in farm to school stimulates an additional $0.60 to $2.16 of local economic activity, in one case resulting in $1.4 million overall contribution to the state.40
- Strengthen connections within the state's food economy.40
- Increase in student meal participation from 3 percent to 16 percent (average +9 percent), generating increased revenue for schools through meal programs.8-9,20-21,23-25,36,41,49,58
- Decrease in school meal program costs.41,48

Farmer and Producer Income
- Increase in local procurement as farm to school programming matures, with documented local sourcing reaching up to 50 percent of all produce purchases in season.7-4,20,22,23,25,36-37
- Average 5 percent increase in income from farm to school sales and establishment of a long-term revenue stream for individual farmers.7-9,20,22-23,36,39,55
- Increase in market diversification and economic growth opportunities for farmers; positive relationships for farmers with school districts, parents and community members; farmers contracted to plant crops for schools; opportunities to explore processing and preservation methods for institutional markets; establishment of grower collaboratives or cooperatives to supply institutional markets.36-37,68

Public Health

Farm to school is a community-based strategy that includes a focus on creating a healthy school food environment.1 Farm to school activities support development of healthy eating habits for children while improving family food security by boosting the quality of school meal programs.7-5

Student Nutrition Behaviors
- Improvement in early childhood and K-12 student health behaviors, including choosing healthier options at school meals, consuming more fruits and vegetables through farm to school meals and at home (+0.99 to +1.3 servings/day), consuming less unhealthy foods and sodas, reducing screen time and increasing physical activity.5-31,43-46,49-51,53,57-61,64,87,88
- Increase in fruit and vegetable consumption among those with the lowest previous intake.31
- When schools offer school gardens, 44.2 percent of students eat more fruits and vegetables; when schools serve local food, 33.1 percent of students eat more fruits and vegetables.46
- Demonstrated willingness to try new foods and healthier options (in early childhood and K-12 settings).7,20-22,30-33,45,47
- Tripled amount of fruit and vegetable consumption when students participate in hands-on, food-based activities.47
- Minimized 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.50,59,61

Knowledge, Attitudes and Access
- Improvement in nutrition habits, environmental awareness and health-related knowledge.57,61
- Increase in willingness to try and consumption of fruits and vegetables at an older age due to gardening at a young age.60
- Increase in access to fruits and vegetables; increase in planning and preparing meals at home.57,61-64
- 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; positive changes in shopping patterns reflecting healthy and local foods.7,20,22,27,33,68
- Increase among young children in asking their families to make healthier purchases.33
- Improvement in household food security.40
- Improvement in food service operations to support healthy outcomes, such as increased cafeteria offerings of fruits and vegetables; development of new seasonal recipes; changes in cafeteria waste management policies.8-9,21,23-25,36,37
Education

Student Engagement and Academic Achievement
- Increase in knowledge and awareness about gardening, agriculture, healthy eating, local foods, nutrition, growing cycles, seasonality and other STEM concepts (in early childhood and K-12 settings).20,22,26,31-33,42,44,48,49,51,61,68
- Enhanced overall academic achievement in K-12 settings, including grades and test scores; increase in opportunities for physical activity and social and emotional growth; increase in school engagement.53,56,63,57
- Provides children with an understanding of agriculture and the environment; provides children with opportunities for social and emotional growth; improves life skills, self-esteem, social skills and behavior.34-35,48,50,53,57,63
- Increased opportunity for innovative teaching platforms for core subjects, such as science, math and language arts in early childhood and K-12 settings.68
- Greater opportunity for necessary experiential and hands-on learning.50,69
- Encourages low-income students and students of color to engage in food and environmental issues in their communities.31

Educator and Parent Engagement
- Positive changes in teachers’ diets and lifestyles; positive attitudes about integrating farm to school related information in curriculum; intention to implement farm to school activities in the classroom.20,22,30,52,66
- Increase in knowledge among parents of young children about farmers’ markets.33
- Increase in parent acceptance of farm to school programs as their children demonstrate healthier behaviors such as increased fruit and vegetable consumption.24
- Increased parent engagement in early childhood educational opportunities.68
- 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.22,38

Environment

Food Waste
- 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.41,56,58

Sustainability
- Reduced transportation-related environmental impacts, such as emissions of air pollutants.50,71
- Support of environmentally sound, sustainable and socially just approaches to food production, processing, packaging, transportation and marketing.68

Community Engagement
- Increase in community awareness about and interest in purchasing local foods and foods served in school cafeterias.22
- Improved acceptance of healthier school meals among the community.58
- Increase in opportunities to combat racial and economic inequities in the school food system.70
- Increase in support from parents and community for healthier school meals.41,58
# Summary of Farm to School Benefits

<table>
<thead>
<tr>
<th>Population</th>
<th>Reach</th>
<th>Benefits</th>
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<tbody>
<tr>
<td><strong>Students</strong></td>
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<td></td>
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<tr>
<td>Fruit and vegetable consumption</td>
<td>Increased +0.99 to +1.3 servings per day</td>
<td>Public Health</td>
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<tr>
<td>Physical activity</td>
<td>Reduced screen time and increased physical activity</td>
<td>Public Health</td>
</tr>
<tr>
<td>Health</td>
<td>Minimized diet-related diseases such as childhood obesity and diabetes</td>
<td>Public Health</td>
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<tr>
<td>Food system awareness</td>
<td>Increased knowledge about gardening, agriculture, healthy food, local food, seasonality</td>
<td>Public Health Education</td>
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<tr>
<td>Food choices</td>
<td>Willingness to try new and healthy food; choosing healthier options in the cafeteria and at home</td>
<td>Public Health Education Community Engagement</td>
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<tr>
<td>Academic achievement</td>
<td>Overall improvement in both grades and test scores (K-12)</td>
<td>Education</td>
</tr>
<tr>
<td>Behavior</td>
<td>Improved life skills, self-esteem, social skills and other types personal growth</td>
<td>Education</td>
</tr>
<tr>
<td><strong>Schools</strong></td>
<td></td>
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<tr>
<td>Meal participation</td>
<td>Average increase of 9% (range 3% to 16%)</td>
<td>Economic Development Public Health</td>
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<tr>
<td>Meal cost</td>
<td>Lowers school meal program costs</td>
<td>Economic Development</td>
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<tr>
<td>Local food sourcing</td>
<td>Reaching up to 50% of all produce purchases in season</td>
<td>Economic Development Environment</td>
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<td>Cafeteria options</td>
<td>Increased offerings of fruits and vegetables; new seasonal recipes; new waste management policies</td>
<td>Public Health Environment</td>
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<tr>
<td>Food service staff</td>
<td>Improved morale; increased knowledge of local food</td>
<td>Education Community Engagement</td>
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<td>Educators</td>
<td>Positive diet and lifestyle changes; greater intent to integrate farm to school activities in the classroom</td>
<td>Public Health Education Community Engagement</td>
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<tr>
<td>Learning opportunities</td>
<td>Greater opportunity for hands-on, active and experiential learning opportunities</td>
<td>Public Health Education</td>
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<tr>
<td><strong>Farmers and Producers</strong></td>
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<tr>
<td>Income</td>
<td>Average increase of 5%</td>
<td>Economic Development</td>
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<tr>
<td>Markets</td>
<td>Increased diversification and new opportunities</td>
<td>Economic Development Community Engagement</td>
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<tr>
<td><strong>Families and Community Members</strong></td>
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<tr>
<td>Local economy</td>
<td>$0.60-$2.16 economic activity generated for every $1 spent</td>
<td>Economic Development</td>
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<td>Job creation</td>
<td>Each new farm to school job contributes to the creation of additional 1.67 jobs</td>
<td>Economic Development Community Engagement</td>
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<td>Low-income students and students of color</td>
<td>Decreases health risks; encourages community engagement in environmental issues</td>
<td>Public Health Community Engagement</td>
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<td>Parents and families</td>
<td>Increased food security and positive diet changes; increased student participation in meals at home</td>
<td>Public Health Community Engagement</td>
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<td>Food waste and transportation</td>
<td>Decreased food waste; decreased air pollution</td>
<td>Environment</td>
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**Summary of Farm to School Benefits**

- **Population**: Students, Schools, Farmers and Producers, Families and Community Members
- **Reach**: Increased +0.99 to +1.3 servings per day, Reduced screen time and increased physical activity, Minimized diet-related diseases such as childhood obesity and diabetes, Increased knowledge about gardening, agriculture, healthy food, local food, seasonality, Willingness to try new and healthy food; choosing healthier options in the cafeteria and at home, Overall improvement in both grades and test scores (K-12), Improved life skills, self-esteem, social skills and other types personal growth, Average increase of 9% (range 3% to 16%), Lowers school meal program costs, Reaching up to 50% of all produce purchases in season, Increased offerings of fruits and vegetables; new seasonal recipes; new waste management policies, Improved morale; increased knowledge of local food, Positive diet and lifestyle changes; greater intent to integrate farm to school activities in the classroom, Greater opportunity for hands-on, active and experiential learning opportunities, Average increase of 5%, Increased diversification and new opportunities, $0.60-$2.16 economic activity generated for every $1 spent, Each new farm to school job contributes to the creation of additional 1.67 jobs, Decreases health risks; encourages community engagement in environmental issues, Increased food security and positive diet changes; increased student participation in meals at home, Decreased food waste; decreased air pollution
- **Benefits**: Public Health, Educational, Community Engagement, Economic Development, Environment

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[Source: National Farm to School Network]
Resources

42. Mercier S. Food and Agriculture Education in the United States. AGree. 2015.
45. County Health Rankings. Farm to school programs. 2015. Available at http://www.countyhealthrankings.org/policies/farm-school-programs
58. USDA Office of Communications. New USDA Data Show Growing Farm to School Efforts Help to Reduce Plate Waste, Increase Student Participation in Healthier School Meals Program. 2015. Available at http://content.govdelivery.com/accounts/USDAOC/bulletins/12076ef
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