One Bite at a Time

Compiled by VT FEED, a partnership of Food Works at Two Rivers Center, the Northeast Organic Farming Association of Vermont, and Shelburne Farms in collaboration with key partners throughout Vermont

“It’s been a cultural shift in our school. We look for teachers and staff now that have a background or interest in integrating food education into their job. I even had parents on the school board ask me about my commitment to food education during my interview.”

— Barrett Williams, Principal
SHARON ELEMENTARY SCHOOL
About Farm to School

Farm to School connects K-12 students to local farms in order to serve healthy meals in school cafeterias, support the local agricultural economy, improve nutrition, and provide an integrative context for hands-on learning. Farm to School education is place-based; programs are shaped by the unique resources of the community and region in which it operates.

Vermont is a rural state with a long history of linking agriculture and education. Recent Youth Risk Behavior data indicates high school students in Vermont eat more fresh fruits and vegetables than youth from most other states. We believe this is due in part to Vermont’s growing Farm to School movement, which has been working for more than a decade statewide to connect classrooms, cafeterias, and communities.

The State of Vermont offers policy level support of Farm to School through planning and implementation grants that schools apply for through the Vermont Agency of Agriculture, Food and Markets. School food service staff are supported to source and cook produce from nearby farms, and teachers receive professional development to weave farm-food-nutrition themes into K-12 curricula. As a result, students throughout Vermont are cooking and taste-testing new recipes in their classrooms, tending school gardens, and helping out on nearby farms during field trips. All of this is adding up to a change in school food culture that encourages enjoyment of fresh, local food.

“We graduated our first 6th grade that has been part of the Farm to School curriculum since kindergarten. Our 6th graders have more knowledge about food and practical skills on gardening and meal preparation than I had coming out of college.”

— Teacher

SHARON ELEMENTARY SCHOOL
In Vermont, 55% of children buy lunch at school and 17% buy breakfast. With schools serving more than 50,000 lunches daily and 17,000 breakfasts, the cafeteria is an obvious place to start encouraging children to eat more fruits and vegetables. Our survey showed that students who report always eating and liking school lunch have a greater probability of meeting the Dietary Guidelines for Americans (DGA). Anecdotally, Farm to School programming seems to play an important role. Most (7 out of 10) food service directors who were interviewed said participation in eating school lunch has gone up since Farm to School programs started at their schools.

Making Fresh Fruits & Vegetables Available
Studies show that students’ average daily consumption of fruits and vegetables increases when these foods are available in the cafeteria. But availability is dependent on food service having the tools to deliver the fresh food to students. Our survey found that students are more likely to have a positive attitude towards fruits and vegetables if a school has the proper cafeteria facilities (salad bar, salad spinner, refrigerator, freezer, etc.); can prepare foods on site; and involves students in food preparation. Guidance, training, and funding through Farm to School likely plays an important role. Most (8 out of 10) food service directors reported having added fruit and vegetable preparation equipment since implementing Farm to School programs.

“I know kids get excited about what local fresh item is going to be on the menu each day. Conversations at the lunch tables are about how good, really good the food is. Our cook is now a chef.”

— Student
CABOT SCHOOL

“The keys to success are persistence and availability. Keep the new foods under their noses and persistently send the message of healthy eating. Just like brushing your teeth is expected, kids should expect to eat healthy snacks like an apple. We built our Farm to School program one kid at a time.”

— School Nurse, HARTLAND ELEMENTARY SCHOOL
While getting fruits and vegetables in front of children is an important first step, changing attitudes and behaviors towards trying new foods is also an important key to increasing consumption. Our study found that students with better attitudes towards eating fruits and vegetables tend to consume more of them. Classroom teachers help change social norms around food by using food as an integrative context for learning all subject areas. Engaging students in hands-on, farm-food-nutrition activities such as taste tests; or planting, picking and preparing food, enables children to become familiar with new foods. Often when children see their peers sampling new foods in the classroom, they are more willing to try it themselves. However, in this study, no one Farm to School practice or activity could be pinpointed as the “magic bullet” to change student behaviors and attitudes towards fruits and vegetables. Since students at Vermont schools with Farm to School programs were above the state and national averages for fruit and vegetable consumption, it appears the overall exposure to many Farm to School practices, over time, has an influence on changing or reinforcing student attitudes about food.

“Sometimes a food may be first introduced to a child in school. I served asparagus once and many kids had never eaten it before. They were reluctant, but since other kids helped cook it, they tried it. If they like it, they go home and ask for it from their parents.”

— Food Service Director
TROY ELEMENTARY SCHOOL
Parents are noticing a difference. Kids are helping make meals at home and asking for salad when they go out to restaurants.”
— Teacher
SHARON ELEMENTARY SCHOOL

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“My kids are now more adventurous as to what foods they are willing to try. They may not like it the first time around, but at least they try it.”
— Parent
LAWRENCE BARNES SCHOOL
BURLINGTON

Parents Make the Difference

Getting fruits and vegetables in schools and having students try them may not be enough to instill a new behavior without reinforcement at home. While classroom, cafeteria, and community activities are integral to most Farm to School programs, the factor in our study that consistently predicted a student’s attitude toward food was their parent’s attitude and behavior. Children have a greater probability of having a positive attitude towards eating fruits and vegetables if their parents are making it accessible, encouraging them to eat it, and eating more fruits and vegetables themselves at home.

Our survey found that 80% of the students in our Vermont Farm to School schools are active in the food cycle at home (gardening, food preparation, and related activities). It’s not surprising, then, that Vermont schools with Farm to School programs have almost double the rates of fruit and vegetable consumption compared to the national average. Nationally, only 24% of students of similar age met the DGA for fruits, and only 16% met the DGA for vegetables. Our study also indicates that students who have met a farmer have a greater probability of having positive attitudes towards eating fruits and vegetables.

This suggests that we should both encourage parental involvement and strengthen partnerships with local farmers for the long-term success of Farm to School.
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Farm to School stakeholders from the following organizations and agencies met regularly during 2010/2011 to share information, collect data and collaborate on the evidence-based findings in this report.

Burlington School Food Project ........................................ www.burlingtonschoolfoodproject.org
Food Works at Two Rivers Center ........................................ www.foodworksvermont.org
Green Mountain Farm to School ........................................ www.greenmountainfarmtoschool.org
Northeast Organic Farming Association ................................ www.nofavt.org
PEER Associates .................................................................. www.peerassociates.net
Shelburne Farms ............................................................... www.shelburnefarms.org
Upper Valley Farm to School Network .................................. www.uvfs.org

University of Vermont:
Center for Rural Studies .................................................... www.uvm.edu/crs
Center for Sustainable Agriculture ..................................... www.uvm.edu/~susagctr
Dept. of Nutrition and Food Science ..................................... www.nutrition.uvm.edu
Dept. of Community Development & Applied Economics ........ www.uvm.edu/cdae
Vermont Agency of Agriculture, Food & Markets .................. www.vermontagriculture.com
Vermont Department of Education ....................................... www.education.vermont.gov
Vermont Department of Health ........................................... www.healthvermont.gov
Vermont FEED ................................................................. www.vtfeed.org

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