



Farm-to-School Purchasing Builds Social Equity in Vermont

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Abstract

Nearly all elementary and secondary schools provide lunch for students, often offering eligible students free or reduced-price meals to increase social equity. In light of rising rates of childhood obesity and the connection between obesity and socioeconomic status, researchers are questioning the nutritional value of school lunches. Locally sourced, less-processed ingredients in school meals may increase the quality of nutrition provided in school lunches, but are perceived as more expensive. This study uses results from a survey of Vermont schools to analyze the correlation between the socioeconomic makeup of schools, their likelihood to purchase local foods and how much they spend on local foods.

School-Lunch and Nutritional Equity

- Two thirds of schools serve lunches that are too high in fat (Crepinsek et al 2009); participation in the National School Lunch Program (NSLP) leads to increased fat intake (Gleason and Suitor 2003).
- Students from low-income families are more likely to be overweight or obese (ADA 2006, O'Malley 2007, Viewing et al 2007).
- Low socioeconomic status is directly correlated with participation in the NSLP (Dunifon and Kowaleski-Jones 2003, Gleason 1995, Probart et al 2006).



Photos: VT-FEED

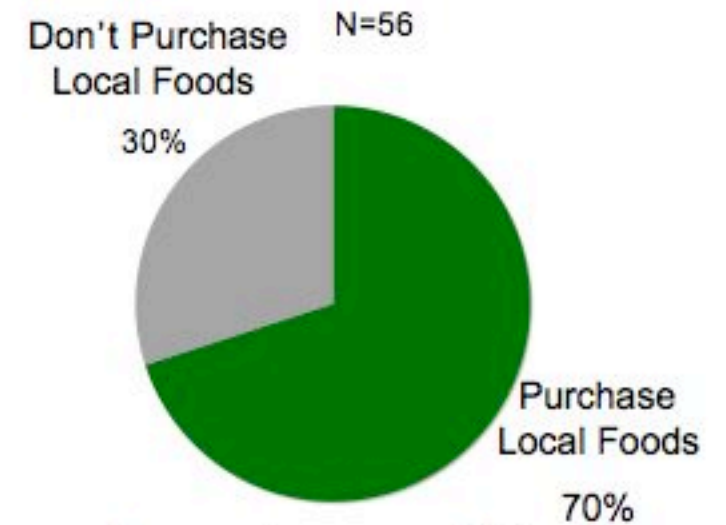
Farm-to-School and Kids' Nutrition

- FTS programs increase students' intake of fresh fruits and vegetables and can improve knowledge of nutrition and the food system (Croom 2005, Graham et al 2004, Joshi et al 2008, Joshi and Beery 2007, Ohmart and Feenstra 2004).
- Cost is often cited as a barrier to implementing FTS programs (Berkenkamp 2006, Izumi et al 2006, Ratcliffe and Smith 2007).

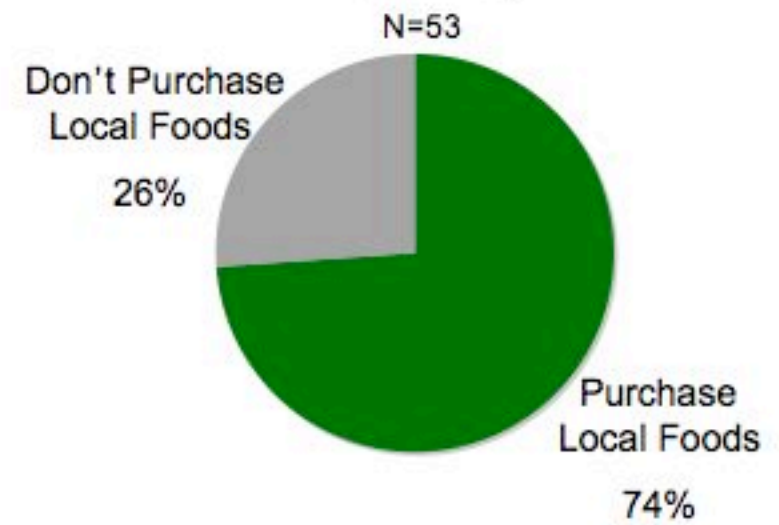
Acknowledgments

- This work was supported by funding from the Vermont Agricultural Experiment Station and through the USDA-CSREES Special Grant #08-001366.
- Vermont Food Education Every Day (FEED) has worked with more than one third of Vermont schools to develop farm-to-school (FTS) programs (vtfeed.org).
- The Vermont Department of Agriculture, Food and Markets administers a grant program for schools that are planning or implementing FTS programs (vt-aic.org/farmtoschool).

Higher-Income Schools (Below Median Free/Reduced-Price Lunch Rate)



Lower-Income Schools (Above & Including Median Free/Reduced-Price Lunch Rate)



Local Foods Spending Level, 2006-07



Methods

Survey

- Developed by VT-FEED
- Administered by VT-FEED in March 2007 via mail and/or telephone.
- Follow-up surveys were sent in February 2008 to increase response rate.
- 129 surveys were completed by food service providers, representing 266 of approx. 300 VT schools.

Analysis

- Performed by UVM researchers, in consultation with VT-FEED
- Local foods purchasing was cross-tabulated with schools' status above or below median free/reduced-price lunch rate.
- Spearman (nonparametric) correlation calculated between schools' free/reduced-price lunch rate and local foods spending level (n=69).

Schools per food service provider (mean)	2.10
Breakfasts served to students per day (median)	50.00
Lunches served to students per day (median)	160.00
Percent of students on free or reduced-price lunch (median)	34.00

Results/Discussion

- There is no significant difference between higher- and lower-income schools' likelihood to purchase local foods (Pearson's Chi-Square = .648).
- There is no correlation between schools' free/reduced-price lunch rate and their level of local foods purchasing (coefficient = -.203; two-tailed significance = .095).

In Vermont, food service providers for schools with lower-income enrollments are no less likely to purchase local foods than those for schools with higher-income enrollments. This means that lower-income students may have equitable access to fresh, locally produced food, when compared to higher-income students.

In light of these findings, Vermont public schools appear to be critical institutions through which local-foods-based programming can reach children from all socioeconomic groups equally. Farm-to-school programs may be an effective strategy for improving school lunch nutrition, as well as nutrition and food system awareness, for all children in Vermont.

