Missouri Farm to School: Survey Results

The Missouri Farm to Institution Project

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Introduction

In May 2010, Bill McKelvey, aided by Nicole Bodkin, who is pursuing a master’s in public health, began to search the Internet and make inquiries with national contacts about farm to school surveys from other states. The search uncovered a number of surveys from states including Minnesota, Oklahoma, Iowa, Pennsylvania and New York. These and other surveys, including those found in Bearing Fruit: Farm to School Program Evaluation Resources and Recommendations by Anupama Joshi and Andrea Misako Azuma, were reviewed and used to create the Missouri Farm to School Survey. Like many other surveys, the Missouri survey was designed to capture information from K-12 food and nutrition service directors and others closely linked to school food services.

A draft of the survey was reviewed by a 10-member advisory team along with a program officer and visiting researcher from the U.S. Centers for Disease Control and Prevention. The survey was then pilot tested by seven food service directors from Missouri.

The survey was disseminated in October 2010 by Karen Wooton, school food service coordinator for the Missouri Department of Elementary and Secondary Education. It was sent to 754 local education agencies. These agencies included all public and private elementary and secondary schools in Missouri that participate in the National School Lunch program. The survey was closed on November 11, 2010. The survey response rate was 56 percent (421/754).

Part I of the survey asked basic questions about the management of food service operations, the service of fresh fruits and vegetables, and school wellness policies.

Part II of the survey asked questions about food service staff skills and facilities.

Part III of the survey asked a range of questions about a school district’s use of locally grown foods, perceptions of the barriers and opportunities associated with using locally grown food, and interest in using locally grown food.

An executive summary and more comprehensive summary of the survey results follows. If you have any questions or comments, please contact Bill McKelvey at McKelveyWA@missouri.edu or 573-882-3273.

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Executive Summary

In the summer of 2010, the Missouri Farm to Institution Project embarked on a systematic assessment of the status of K-12 farm to school activities in Missouri. This assessment surveyed food and nutrition service directors and others closely linked to public and private K-12 dining services. The results of the Missouri Farm to School Survey showed that farm to school activities are beginning to take root across the state. In fact, the survey uncovered many farm to school programs that were previously unknown to those working on farm to school initiatives at the state level.

It is estimated that at least 78 school districts or private schools incorporated locally grown food into school meals or snacks during the regular 2009-2010 school year. This represents approximately 10 percent of the 754 public and private schools in Missouri that participate in the National School Lunch Program. Schools involved in farm to school tended to use a food service vendor or distributor more frequently rather than working directly with a farmer to acquire locally grown food. The most popular items purchased included apples, melons, cucumbers, tomatoes and peppers. For the majority of schools, local produce accounted for between 1 percent and 5 percent of the total amount of produce purchased.

The survey also uncovered an exceptional amount of interest in farm to school – an overwhelming majority of survey respondents (88.3 percent) noted that they are either interested in using locally grown food in the future or would like to use more locally grown food in school meals and snacks. Their primary reasons for wanting to use locally grown food included supporting the local community, economy and farmers, as well as helping students and adults have healthier diets through increased consumption of fresh fruits and vegetables.

Food service directors were also realistic about the challenges of farm to school. They noted that inadequate supply of locally grown food in their area, along with the cost of the food and the reliability of the supply, could limit their ability to include more locally grown fresh fruits and vegetables in their cafeterias. They also noted that they would be more likely to purchase locally grown food if: vendors were willing to purchase from local farmers and identify the food as “locally grown,” there was a central place to order from multiple farmers, and there was clarification of federal, state and local regulations concerning local food purchasing. However, by and large, food service directors believe that their kitchens and staff are able to accommodate and increased use of local, fresh food.

Overall, the survey showed that farm to school activities in Missouri are in the emergent stage. Although the use of locally grown produce in school meals and snacks is far from the norm, there are a number of schools taking innovative approaches to increase the consumption of fresh fruits and vegetables within their school community. Supply, logistical and informational challenges remain. Though as this survey demonstrates, schools have a great interest in overcoming these challenges in order to both improve the health of their community and support their local economy.
Survey Results

Part I: Food Service Management and Methods for Serving Fresh Fruits and Vegetables

Food Service Management

- 81% of respondents noted that their food service operation is self-managed or self-operated.
- 19% noted that their food service operation is managed through a contract with a food service company.

The primary food service management companies operating in Missouri K-12 public and private schools include Chartwells, Opaa! and Sodexo. A total of 10 food service management companies were identified.

Purchasing Cooperatives

- 70.7% of districts or private schools are not part of a purchasing cooperative.
- 14.9% are part of a purchasing co-op.
- 14.4% of respondents noted that they did not know if they a part of a purchasing cooperative.

Methods for Serving Fresh Fruits and Vegetables: Respondents were asked three questions about the methods they use to serve fresh fruits and vegetables.

**Salad Bars:** With regard to schools’ use of salad bars, the results generally indicate that schools either use salad bars every day or zero days of the week. Salad bars are used infrequently in elementary schools.

- 15.7% of elementary schools offered salad bars five days per week.
- 37.9% of middle/junior high schools and 42.7% of high schools offer salad bars five days per week.
- 76% of elementary schools, 47% of middle/junior high schools and 45% high schools do not use salad bars.

**Pre-made Salads:** In general, pre-made salads are served more frequently than salad on salad bars across all grade levels.

- Elementary schools serve pre-made salads five days per week at roughly half the rate (23.3%) of middle/junior high schools (41.2%) and high schools (49.4%).
- 36.3% of elementary schools, 30.1% of middle/junior high schools and 30.8% of high schools do not offer pre-made salads.

**A la Carte Dining:** Fresh fruits and vegetables are served through a la carte dining to varying degrees.

- The majority of elementary schools — 52.9% — either do not offer a la carte dining or do not offer fresh fruits and vegetables through a la carte dining.
- 21.4% of elementary schools do offer fresh fruits and vegetables through a la carte dining five days per week.
- 39.1% of middle/junior high schools and 45.3% of high schools offer a la carte fresh fruits and vegetable five days per week.
Current Food Service Vendors: The primary food service vendors identified in this survey include Graves Menu Maker, Kohl Wholesale, Springfield Grocer Company, Sysco Corporation and US Food Service. A host of other vendors were identified.

Wellness Policy

- 15.2% of school wellness policies include language that either encourages or requests locally grown produce and products be used.
- 57.2% of school policies do not include such language and 27.6% of respondents did not know if their wellness policy included such language.

Part II: Food Service Staff Skills and Facilities

Staff Skills: The survey showed that the majority of food service directors believe their food service staff has the skills to receive, store, safely handle, and prepare fresh fruits and vegetables. Staff skills and abilities were rated as good or excellent for the following:

- Ability to receive fresh fruits and vegetables (78.4%)
- Ability to store fresh fruits and vegetables (76.1%)
- Safe food handling skills (95.8%)
- Knife skills (83.4%)
- Cooking/culinary skills (78.8%)

Kitchen Facilities: The majority of directors also indicated that food service operations have enough staff (75.9%), refrigerator capacity (64.8%) and preparation space (76.8%) to accommodate an increased use of fresh fruits and vegetables.

When asked about particular kinds of kitchen equipment often used to prepare and serve fresh produce, directors noted that kitchens were equipped with the following:

- Sinks (98.8%)
- Knives (98.3%)
- Cutting boards (97%)
- Ovens (96.3%)
- Stove-top burners (89.3%)
- Slicers (88.3%)
- Mixers (87.8%)
- Apple corers (39.5%)
- Fruit and vegetable wedgers (33.8%)
- Tilt skillets (33.5%)
- Industrial food processors (23.8%)
- 53.3% of the districts are equipped with salad bars
- Very few schools are equipped with some form of a steamer.
Part III: Locally Grown Food

Local Food in Schools

- 50.6% of school food service directors noted that a variety of strategies were used to both incorporate local food in schools and raise students’ awareness about local food.
- 36.6% of these directors noted that they served local food in meals and snacks.
- 21.6% noted that students had visited a farm or garden as part of a field trip.
- 20.7% noted that students were able to participate in a school garden.
- Other strategies included using promotional materials to highlight local food offerings (17.4%), making announcements to school staff and administrators (13.1), providing local food education to students (11.3%), and holding a special local food tasting or event (10.3%).

Interest in Using Locally Grown Food

- 88.3% (317) of directors noted that they are either interested in using locally grown food or would like to use more locally grown food in school meals and snacks.
- 4.5% (16) of directors are already using as much as they can.
- 7.2% (26) of directors are not interested in using locally grown food.

Requesting and Purchasing Locally Grown Food

Knowledge of Vendors’ Local Offerings

- 39.7% of food service vendors are not aware of whether their current vendors offer locally grown produce or products.
- 31.2% believe their vendors offer locally grown food.
- 29.1% believe they do not offer locally grown food.

Requesting and Purchasing Locally Grown Food: Food service directors both requested and purchased locally grown food from food service vendors and farmers during the 2009-2010 school year.

- 26.7% (98) of directors requested locally grown food from a vendor.
- 14.6% (51) requested locally grown food from a farmer.

Those who requested locally grown food were not always successful in their attempt to acquire the product.

- 22.6% (76) of directors actually purchased locally grown food from a vendor.
- 13.3% (42) purchased directly from a farmer.
Types and Amount of Local Produce Purchased: Food service directors purchased a range of local produce items during the 2009-2010 school year. The most popular items included apples, melons, cucumbers, tomatoes, and peppers. To a lesser degree, items including okra, pumpkins, peaches, lettuce, winter squash, sweet corn, potatoes, sweet potatoes, Asian pears, eggplant and onions were purchased.

- For 62.6% of food service directors, purchases of local produce accounted for between 1% and 5% of the total amount of produce purchased.
- For 16.5% of directors, local produce made up between 6% and 10% of produce purchases.
- For 11% of directors, between 11% and 20% of purchases.
- For 9.9% of directors, greater than 20% of produce purchases were from local sources.

Experience with Purchasing Locally Grown Food: For those who actually purchased locally grown food from a vendor or farmer, their experience was relatively positive, though varied depending on who they purchased from.

- 90% of respondents who purchased locally grown from a food service vendor indicated that their experience was either trouble free or mostly trouble free.
- 67% of those who purchased directly from a farmer indicated that their experience was trouble free or mostly trouble free.
- Based on their experience, 81.1% (73) of respondents said that they are very likely to purchase locally grown food from a vendor in the future.
- For those who purchased directly from a farmer, only 52.1% (38) said they are very likely to purchase from them again.
- 28.8% (21) are somewhat likely to purchase again.
- 19.2% (14) said they are not likely to purchase directly from a farmer.
- 3.3% (3) said they are not likely to purchase from a vendor.

Respondents who stated that they were only “somewhat likely” or “not likely” to purchase locally grown food in the future noted that inconsistent quantity (38.9%), unreliable source (38.9%), expense (33.3%), and effort (27.8%) were the primary reasons for their relative lack of interest.

Benefits, Concerns, and Motivations

Benefits of Serving Locally Grown Food: Directors noted three primary benefits of serving locally grown food in their schools:

- Supporting the local economy, community, and farmers (67.8%, 246)
- Providing children and adults with greater access to fresh fruits and vegetables (45.5%, 165)
- Helping children and adults have better, healthier diets (42.7%, 155)

Directors also noted that serving locally grown food may be good for a school district’s public relations (25.6%) and provide food that has better flavor (25.3%) and comes from a known source (23.4%).
Concerns about Serving Locally Grown Food: Directors noted three primary concerns with purchasing and serving locally grown food in their schools:

- Inadequate supply in their area (54%)
- Cost (43.6%)
- Reliability of supply (40.8%)

Directors noted additional concerns including:

- Food safety (30.1%)
- Seasonality of local produce (25.5%)
- Delivery considerations (24.4%)
- Quality and consistency of product (21.9%)

Motivations to Use or Increase Use of Local Food: Directors noted a range of factors that would motivate them to use more locally grown food.

- More growers/producers in their area to purchase from (52.6%)
- Vendors willingness to purchase from local farmers (46.6%)
- Central place to order from multiple farmers (44.1%)
- Financial incentives for making local purchases (39.9%)
- Assurances of food safety (39.7%)
- Rules that make it easier to purchase from local farmers (28.9%)

Resources for Increasing Use of Local Food: By and large, directors noted that having a directory of farmers and vendors who offer local products (86.6%) and clarification of federal, state, and local regulations concerning local food purchasing (64.2%) would be the most useful resources for increasing their use of locally grown food.

A range of other resources were noted, including:

- Examples of how other institutions use locally grown food (36.9%)
- Information and newsletters to share with families (29.6%)
- Local food promotional materials for cafeterias (28.5%)
- School and student tested recipes that feature local food (25.7%)
- Face-to-face workshops (22.9%)
- A website with resources and best practices (22.1%)