Farm to early care and education (ECE) promotes child health and increases access to healthy foods through a collection of strategies that are centered in experiential learning and family and community engagement. Farm to ECE brings three core elements—gardening, food and agriculture education, and local food purchasing—into every type of ECE setting. These include family child care homes, child care centers, Head Start, and preschools in K-12 districts. Local food purchasing can vary widely in ECE settings depending on site size, setting, and purchasing goals. Smaller sites that may require very small quantities of food often purchase local foods from a local grocery store, co-op, farmers market, or through a direct relationship with a local small farm. Larger centers or chains of centers that require larger food quantities can purchase local food through a broadline distributor, a food hub, or a larger local farm or farmer cooperative.

Local purchasing supports small farms while providing wholesome foods to children, staff, and families. In addition to the benefits of farm to ECE outlined in “Why Farm to Early Care and Education” 2021 survey brief, local foods can further promote fruit and vegetable consumption as local products are often fresher, of high quality, and described as better tasting than non-local foods. Farm to ECE, including local procurement, can benefit families by increasing families’ access to local foods. Engaging families can also increase their knowledge of local food sources and connect them with farmers and other local vendors. This also benefits farmers by helping them build their customer base.

In its fourth iteration, intended to add to the knowledge of the previous three surveys, National Farm to School Network (NFSN) partnered with Michigan State University Center for Regional Food Systems (CRFS) to implement the 2021 version of the National Farm to Early Care and Education Survey. The survey series completed by NFSN and CRFS in 2012, 2015, 2018, and now 2021, is the only national farm to ECE–specific assessment of activity reach and participation. Information on the background and methodology of the 2021 National Farm to Early Care and Education Survey can be found in the “Background and Methods” 2021 survey brief. This brief aims to explore the local purchasing and serving practices of participants, including barriers to local purchasing and financial support received.
Key Findings

- Of respondents participating in farm to ECE, 1,628 (68%) purchase and serve local foods for their site’s meals, snacks, or activities. Respondents estimated that an average of 30% of their total foods purchased were locally grown or produced.

- Top barriers to both starting and maintaining local purchasing were found to be: cost of items, knowing how to order local items, finding suppliers/farmers to supply local foods, and obtaining information about product availability.

- There is a statistically significant association between sites that received CACFP funding and sites that purchased and served local foods and percentage of local foods purchased.

- Only 47, or 2% of respondents participating in farm to ECE received reimbursement for locally sourced foods in addition to CACFP reimbursement, such as local food incentive or additional grant funding.

Practice and Policy Recommendations

- Utilize CACFP participation as a pathway to farm to ECE. Integrate farm to ECE into CACFP “train the trainer” and professional development practices, highlighting CACFP and farm to ECE crossover, especially within QRIS and local food reimbursement. Build farm to ECE into CACFP systems by integrating farm to ECE in CACFP administrative roles and include CACFP in local food incentive programs.

- Increase knowledge about local food purchasing and decrease barriers to availability by providing local purchasing guidance and identifying ways to introduce providers to farmers through strategies such as directories, matchmaking, networking events, and regional hubs. Reduce financial barriers through messaging, programs, and policy such as local incentive programs. Infrastructure barriers can be addressed through increasing visibility of and developing funding that can be used for kitchen supplies, storage, and appliances.

- Highlight strategies to purchase local within current practices while creating avenues for and promoting more direct purchasing options.
Sourcing Local Foods

Of the 2,397 farm to ECE participating respondents, 1,628 (68%) purchased and served local products at their sites during meals, snacks, or classroom activities (Table 1). Respondents serving local products indicated their definition of “local” from a selection of geographical choices. A third (33%) defined local as within the “same city/county” while 21% defined “local” as “produced within a 50 mile radius” and 14% reported that “local” meant “produced in the state” (Figure 1).

Table 1. Frequency of Local Food Purchasing¹

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1628</td>
<td>68%</td>
</tr>
<tr>
<td>No</td>
<td>487</td>
<td>20%</td>
</tr>
<tr>
<td>I Don’t Know</td>
<td>175</td>
<td>7%</td>
</tr>
<tr>
<td>Missing</td>
<td>107</td>
<td>4%</td>
</tr>
</tbody>
</table>

¹ N=2397

Figure 1. Respondents’ Definition of Geographically “Local”
Respondents were also asked about their local food sourcing practices including purchases from direct sources (Figure 2), such as individual farmers or producers, on-site or community gardens, farmers markets, or farm shares or community supported agriculture (CSA), as well as intermediate sources (Figure 3) such as distributors, grocery stores, or food hubs. Of respondents purchasing local (n=1628), 65% purchased from grocery stores and retail outlets. Other sources included direct from farmers markets (37%), on-site or from a community garden (28%), and direct form individual farmers or producers.
Purchasing Local Foods

Respondents’ total food purchases averaged $31,432 in the last 12 months, with an average of $16,697 (53%) of those purchases coming from local sources (Table 2). Respondents estimated that an average of 30% of their total foods purchased were locally grown or produced when asked. Of note, a wide range of amounts were reported when respondents were asked about the total amount spent on local food at their site, with a range of $0-22 million dollars, which may have affected the mean (Table 2).

Table 2. Total Food and Local Food Purchased in the Last 12 Months by ECE Providers

<table>
<thead>
<tr>
<th>Purchasing Local Foodsa,b</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Amount Spent on Food*</td>
<td>$31,432</td>
<td>$8,000</td>
</tr>
<tr>
<td>Amount Spent on Local Foodb</td>
<td>$16,697</td>
<td>$1,000</td>
</tr>
<tr>
<td>Percentage of food purchasing dollars spent on local food</td>
<td>53%</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

Figure 4. Serving Frequency of Types of Local Foods

The survey also asked about the frequency of serving local products at ECE sites (Figure 4). Respondents shared milk as the most frequently served local product, with 34% of respondents reporting that local milk was served daily. Fruit (27%) and vegetables (27%) were the next most frequently served food types, as reported by farm to ECE participating respondents (n=2397).
When responses naming major and minor barriers to beginning the purchasing of local products were combined, cost and knowing how to order local products emerged as the most frequently cited barriers (71%), as shown in Figure 5. Finding suppliers/farmers to provide local food (67%), followed by obtaining information about product availability (66%), reliability of local product supply (63%), and limited onsite storage (62%) were also frequently reported barriers.

**Figure 5. Barriers to the Continuation of Local Product Purchasing for ECE Sites**

- Knowing how to order local items
- Cost/price of items
- Finding suppliers/farmers to provide local food
- Obtaining information about product availability
- Reliability of local product supply
- Limited onsite storage
- Delivery challenges
- Seasonality of fruits and vegetables
- Challenges with payment arrangement
- Packaging/size of packaging
- Lack of staff time in preparing local foods
- Concerns about food quality
- Availability of processed/precut products
- Lack of skilled/trained staff to prepare local foods
- Lack of kitchen equipment to process/prepare local foods
- Concerns about food safety
- Lack of staff interest in preparing local foods
- State or local purchasing restrictions
- Unable to leverage CACFP or other funding for meals
- Other

Major barrier

Minor barrier
Respondents were also asked about barriers to continuing the purchasing of local products. Cost was the most frequently cited barrier (61%), followed by finding suppliers/farmers to provide local food (52%), obtaining information about product availability (52%), knowing how to order local items (52%), and reliability of local product supply (51%).

**Figure 6. Barriers to Purchasing Local Products for ECE Sites**

- Knowing how to order local items
- Cost/price of items
- Finding suppliers/farmers to provide local food
- Obtaining information about product availability
- Reliability of local product supply
- Limited onsite storage
- Delivery challenges
- Seasonality of fruits and vegetables
- Challenges with payment arrangement
- Packaging/size of packaging
- Lack of staff time in preparing local foods
- Concerns about food quality
- Availability of processed/prefcut products
- Lack of skilled/trained staff to prepare local foods
- Lack of kitchen equipment to process/prepare local foods
- Concerns about food safety
- Lack of staff interest in preparing local foods
- State or local purchasing restrictions
- Unable to leverage CACFP or other funding for meals
- Other

![Barriers to Purchasing Local Products for ECE Sites](image-url)
Changes in Local Purchasing

Of respondents participating in farm to ECE, 53% anticipated increasing local food purchasing in the next 2 to 3 years (Figure 7).

Respondents purchasing local food were asked why they anticipated their local food purchases to increase, decrease, or stay the same through open response.

There were multiple common themes among the 1,004 responses to “why do you anticipate your local food purchases to increase?” The most common reason was provider, administrator, and/or family interest. Reasons for greater interest included supporting local farmers and increasing children’s access to fresh, healthy foods. Other common reasons for anticipated increases in local purchasing included new partnerships with farmers, greater access to other sources of local foods such as farmer’s markets, expansion of gardens and other farm to ECE programming, greater access to resources and funding, new strategic partnerships, and greater infrastructure and capacity. COVID-19 related reasons were also frequently mentioned, specifically increases in projected enrollment and supply chain issues such as reduced access to and increased price of grocery store items.

“Our Staff and Administration have expressed interest in incorporating local food purchases into our snack program.”

“I am learning about local options that are approved by the state to use in the childcare center.”

“As the pandemic constraints lessen we will be able to have more meal-sharing and food preparation activities”
Major themes among the 299 respondents that responded to the question “why do you anticipate your local food purchases to stay the same?” included product availability, enrollment number maintenance, cost of local products, gardening as a substitute for local purchasing, and lack of knowledge, access, staff capacity, and resources. Respondents also cited current purchasing logistics as barriers to increased local purchasing, such as having parents bring in meals and snacks and using vendors, caterers, and wholesale grocers that do not offer local products. Respondents also mentioned lack of administrative and staff support and CACFP regulations as barriers to local purchasing.

“We have to follow CACFP regulations”

“The main director in charge does not always support changing the way to shop or serve food and does not see the importance of overall health over cost.”

“As part of the food program I need itemized receipts and I don’t think I can get those at farmers markets and things like that.”

“Food service company dictates the preferred vendors”

Only 50 respondents responded to the question “why do you anticipate your local food purchases to decrease?” The most common reasons included cost of local foods, lost funding, and limited availability. It should be noted that many respondents misinterpreted the question’s time frame (i.e., decreased purchasing over the next few months instead of decreased purchasing over the next 2-3 years), citing the oncoming cold season as a reason for reduced purchasing.

“We don’t have the availability or resources.”

“Our local farm is closing and we will need to find a new source.”
Food Preparation

Respondents were asked to estimate the total number of snacks and meals they provide for children at their site. On average, farm to ECE respondents serve 83 snacks and 109 meals per day. Respondents were also asked to report the frequency with which they served food prepared from scratch at their site (see Table 3). The frequency at which farm to ECE participating respondents serve local foods is slightly higher than for all respondents, with 30% of farm to ECE respondents preparing food from scratch daily, and 59% preparing food from scratch at least once per week. However, there are sites that do not have on-site preparation of food (8%) or never serve food prepared from scratch (8%).

Table 3. Frequency of Preparing Food From Scratch\textsuperscript{a,b}

<table>
<thead>
<tr>
<th></th>
<th>All Respondents\textsuperscript{a}</th>
<th>Farm to ECE Respondents\textsuperscript{b}</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>Daily</td>
<td>844</td>
<td>29%</td>
</tr>
<tr>
<td>A few times per week</td>
<td>653</td>
<td>22%</td>
</tr>
<tr>
<td>Once per week</td>
<td>182</td>
<td>6%</td>
</tr>
<tr>
<td>Once per month</td>
<td>202</td>
<td>7%</td>
</tr>
<tr>
<td>Never</td>
<td>261</td>
<td>9%</td>
</tr>
<tr>
<td>We have no on-site preparation of food</td>
<td>251</td>
<td>9%</td>
</tr>
<tr>
<td>I don't know</td>
<td>107</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>82</td>
<td>3%</td>
</tr>
<tr>
<td>No response</td>
<td>332</td>
<td>11%</td>
</tr>
<tr>
<td>Total responses</td>
<td>2582</td>
<td>89%</td>
</tr>
</tbody>
</table>

\textsuperscript{a} N=2914  \textsuperscript{b} N=2397

Funding for Local Purchasing

Researchers found a statistically significant association between sites that received Child and Adult Care Food Program (CACFP) funding and sites that purchased and served local foods. There is also a statistically significant association between sites that received CACFP funding and percentage of local foods purchased. Of respondents participating in farm to ECE, 47% received CACFP funding, while 46% of total respondents received CACFP funding (Table 4). Respondents were also asked if they received additional reimbursement for locally sourced items. Of those partaking in farm to ECE, only 47 (2%) reported receiving additional reimbursement in addition to CACFP reimbursement, such as local food incentive or additional grant funding.
Policy Opportunities & Recommendations

CACFP is an important lever for farm to ECE implementation. This is seen in the statistically significant association between sites that received CACFP funding and sites that purchased and served local foods, as well as a statistically significant association between sites that received CACFP funding and the percentage of local foods purchased. It is also important to note that only 46% of respondents received CACFP funding. Considering the important role of CACFP not only in farm to ECE promotion and implementation, but also in overall access to healthy foods, it is imperative to focus efforts on increasing CACFP participation\(^5,6\). CACFP funding can mitigate the cost of local foods and gardening activities and serve as a channel for targeted farm to ECE funding and coaching. However, as seen in open responses, CACFP can be seen as a barrier to farm to ECE participation due to fear of non-compliance with CACFP. Building awareness of the alignment between CACFP and farm to ECE through existing structures such as CACFP specialist trainings and professional development opportunities can incentivize both farm to ECE and CACFP participation among sites. States can also create strong connections between CACFP and farm to ECE within systems by integrating farm to ECE within CACFP position descriptions and building farm to CACFP programming. This can be especially impactful within states that require sites to follow CACFP guidelines regardless of CACFP participation, as farm to ECE can help sites meet these guidelines.

Another approach to leverage farm to ECE through CACFP is incentive programs, such as the Washington, D.C. Healthy Tots Act (HTA) that offers increased reimbursement for each meal served (10 cents per meal) in addition to higher reimbursement for local foods served in CACFP meals (“Local5” reimbursement) and grant opportunities for gardening and nutrition education activities\(^7\). Local food incentive grant programs and farm to school and ECE grant programs, such as HTA, are gaining popularity and can be found in many states including Iowa, Michigan, California, and Washington State. Comprehensive incentive programs can help incentivize both CACFP and farm to ECE, while advancing health, educational, and economic equity. Farm to ECE can also be integrated into CACFP and ECE systems through QRIS. As previously noted in the “Why Farm to Early Care and Education” 2021 survey brief\(^8\), including farm to ECE activities such as gardening and taste tests in QRIS both incentivize and promote farm to ECE participation. Many states currently award QRIS points for participating in CACFP if eligible, and/or following CACFP meal patterns\(^9\). This opportunity can be used to demonstrate linkages between farm to ECE and meeting CACFP meal patterns while earning QRIS points.

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Table 4. Frequency of CACFP Participation\(^a,b\)

<table>
<thead>
<tr>
<th></th>
<th>All Respondents(^a)</th>
<th>Farm to ECE Respondents(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>Yes</td>
<td>1353</td>
<td>46%</td>
</tr>
<tr>
<td>No</td>
<td>1171</td>
<td>40%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>55</td>
<td>2%</td>
</tr>
<tr>
<td>Missing</td>
<td>335</td>
<td>11%</td>
</tr>
<tr>
<td>Total</td>
<td>2579</td>
<td>88%</td>
</tr>
</tbody>
</table>

\(^a\) N=2914 \(^b\) N=2397
Frequently reported barriers to both starting and sustaining local purchasing included the cost of items, not knowing how to order local items, finding suppliers/farmers to supply local foods, and difficulty obtaining information about product availability. Barriers related to lack of knowledge around purchasing logistics can be addressed through local technical assistance and education. Technical assistance providers can assist sites with identifying food suppliers and/or farmers in the area who may be interested in marketing their products to ECE sites and helping them navigate processes for procuring and ordering local foods. Utilizing existing state and regional networks and developing new networks can help providers and farmers connect and help providers reach resources and technical assistance on the purchasing process. Innovative systems have been developed to help providers and farmers connect, including matchmaking services, networking events, and local food mapping projects.

Cost is a consistent barrier to local purchasing that can be addressed through programs, policy, and messaging. These programs can not only reduce the cost of local foods, but can provide avenues for support and growth of farm to ECE programming. Messaging around cost-saving strategies when purchasing local food can also be emphasized, such as the reduced chance of spoilage due to the longer shelf life if they arrive soon after harvest, gardening as a strategy to lower food cost, and using geographic preference when using informal and formal bidding processes. As previously mentioned, networks can help providers build relationships with supportive stakeholders that may introduce them to resources, grant opportunities, or provide direct support to alleviate the cost burden of local purchasing and farm to ECE.

Survey results indicate that the majority of respondents purchasing local foods sourced their local products from grocery stores and other retail outlets (65%). In addition, many respondents in the open response cited inflexibility in current purchasing practices as a reason for maintaining instead of expanding their local purchasing. ECE capacity is a known issue, so highlighting avenues for local purchasing that don’t require large changes in current practices can be beneficial for many sites. Additionally, although it is important to meet providers where they are at in terms of capacity and feasibility, it is important to create avenues to promote more direct purchasing strategies while still making local purchasing easy for providers. ECEs with low volume needs that may be currently purchasing local foods from grocery stores offer a unique opportunity for small and beginning farmers. Smaller sites may also be a good fit for CSA or farm share membership, especially as CSAs don’t require a large amount of extra effort to acquire. Larger and multi-site centers who currently purchase from vendors and caterers can be educated on their ability to request local products, or work towards gaining administrative support to change to vendors that do offer local products. For those who find consistency, sourcing, and availability a barrier, food hubs may be a good option. Though they are less common than farmer’s markets, food hubs provide much of the convenience of a grocery store while still assuring more of the dollar spent makes it directly to the farmer. Working with one vendor keeps administrative burden low, while still providing clients access to a diverse range of products aggregated from various farms. Additionally, some level of frozen local foods and/or stored products are often available year-round. In addition to promoting existing food hubs, efforts can be made to expand businesses that support local food and farmers through grants such as USDA’s Local Food Promotion Program or to allocate state funding towards development of intermediaries such as food hubs. In the goal of increasing local purchasing, training on the value of serving local foods and how to prepare them
including scratch preparation) should be made available to ECE staff to contribute to a longer-term culture shift.

Explore more farm to ECE resources, learn how to get involved, and connect with partners in your state by exploring the National Farm to School Network site at www.farmtoschool.org/ECE. Visit www.foodsystems.msu.edu to find resources and research on regional food systems from Michigan State University Center for Regional Food Systems.

References


8. Riemer Bopp, S., Shedd, M.K., & Stephens, L. (2022). Farm to Early Care and Education Continues to Foster Bright Futures for Children and Communities: 2021 National Farm to Early Care and Education Survey Why Farm to ECE. National Farm to School Network. Farmtoschool.org


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