Harvest of the Month for Early Childhood Education: Parental Perspectives

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This research brief reports on the impact of Harvest of the Month (HOM) for Early Care and Education (ECE) at home to better understand parental perspectives and influences on children’s nutrition behavior. HOM is a farm-to-school programming strategy that features locally grown food in at least one lesson on nutrition and agriculture, a taste-test activity, and a snack or meal recipe each month. This exploratory study relied on a survey to gather data on parental perspectives during the pilot implementation of HOM for ECE in the 2017–2018 school year. The survey was delivered electronically. A total of 21 parents from a campus-based preschool program in the northwest United States reported on the procurement and consumption of HOM food at home. The findings suggest that a variety of HOM foods are being served and consumed at home. The parents placed greater importance on knowing where the food comes from rather than merely serving local food. The parents’ knowledge of farm to ECE, food purchases at farmer’s markets, and participation in community-supported agricultural programs were limited, suggesting the need for continued targeted parental education, which can have a positive effect on the families’ healthy eating habits.

Keywords*:* Harvest of the Month; early childhood nutrition; family nutrition; parental education

## Introduction

The farm-to-school movement aims to change community health outcomes by engaging schools and Early Care and Education (ECE) sites in three core areas: local food procurement, education, and gardening. Harvest of the Month (HOM) is an approach centered on farm-to-school programming that has been successful in increasing knowledge, promoting positive attitudes, and increasing local food consumption in K-12 settings (Margolin et al., 2018; Yoder et al., 2014). In Montana, HOM seeks to increase exposure and support local producers and the food they grow. HOM programming features a locally grown food in at least one lesson on nutrition and agriculture, a taste-test activity, and a snack or meal recipe each month at school. Programming is supported by the distribution of ready-to-use materials, including posters and newsletters for cafeterias and classrooms, and newsletters for parents. In recent years, HOM has expanded its reach, with content and resources available in many states including California, Georgia, Illinois, Montana, South Carolina, and Vermont. To promote connections between local agriculture, increase the availability of nutritious food, and influence eating behaviors in the early years of life, HOM has expanded to include ECE programs, thus broadening the reach from K-12 settings to include younger children and their families.

As children begin developing food preferences and behaviors early on in life, nutrition education in ECE settings can be especially impactful in influencing lifelong eating habits, particularly when combined with efforts at home (Savage et al., 2007). Family members living in the same home as the child, and parents, in particular, are often considered key gatekeepers and socializing agents in forming children’s early eating patterns (Larsen et al., 2015; Maher et al., 2010; Savage et al., 2007). The availability and easy accessibility of food are associated with a greater consumption of healthy food (Savage et al., 2007). Research suggests that food-related parenting practices, including early introduction, positive reinforcement, modeling, and repeated experiences with food are beneficial in encouraging children to engage in healthy eating patterns (Savage et al., 2007). These food-related parenting practices can be reinforced through consistent adult support across multiple environments, where children regularly interact with food, including in childcare settings and at home (Larson & Story, 2009; Savage et al., 2007). A meta-analysis of interventions for children aged five years and under indicated the potential for behavioral change through repeated exposure across multiple settings, and highlighted the need for further research on the implications of these interventions for family habits (Wolfenden et al., 2012).

## Purpose

This study examined family nutrition behavior, including procurement and attitudes toward local food through a survey using an exploratory research design. Data were collected from the parents of preschool children who participated in a pilot HOM for ECE program to: (a) examine trends in household nutrition behavior, including consumption, procurement, meal planning, and (b) explore parents’ perceptions and attitudes pertaining to the importance of HOM products and local foods at home.

## Methods

The HOM for ECE program was piloted in a preschool in Montana from August 2017 to May 2018. Each month, one lesson on nutrition was taught, one taste test was conducted, and one meal or snack menu item was modified to focus on a particular HOM food. For example, the children learned about different parts of an apple, tasted dehydrated local apples, and prepared apple muffins that met the Child and Adult Care Food Program (CACFP) meal pattern guidelines for their afternoon snack. As the academic year lasted 10 months, 10 lessons, 10 taste tests, and preparation of 10 meals or snacks were completed during this period.

## *Sample*

One preschool program located on a university campus enrolled children aged three to six years. It was selected as the setting for this study through purposeful sampling of all participating HOMs for ECE pilot sites and an existing relationship with the researchers. The preschool participates in CACFP and takes pride in offering a project- and play-based curriculum, including healthy and nutritious meals and snacks, according to the family handbook. Under 10% of the families received free and discounted meals and over 50% were employed on campus at the time of this study.

## *Measures*

Researchers were not aware of any previously created short survey with established validity and reliability that measures parental perspectives and food behaviors related to HOM for ECE. The exploratory nature of this study led the research team to design a survey for parents in order to measure the key components of HOM for ECE at home, including local food procurement and consumption, and family meal planning and nutrition behavior. Questions on parental demographics (e.g., age, education, race, socioeconomic status) were not included in the survey, as the aim was to gather preliminary data and parental perspectives to inform future research efforts on the potential impact of HOM for ECE.

The survey comprised 20 questions, of which 12 were fixed, 2 were open-ended, and 6 were Likert-scale questions. Parents were asked to indicate how often (*not sure, never, 1–3 times, 4–6 times, > 6 times*)they or their children consumed each HOM food at school and at home in the month preceding the survey. Weekly menus were posted at the preschool to help parents learn about the meals served at school. Consumption frequency is reported as a percentage of respondents. Questions on gardening habits (e.g., *Do you maintain a garden at home?)*, visits to farmer’s markets,and participation in Community-Supported Agriculture (CSA) were asked in order to gather information on the established connections to local food. Parents were also asked to categorize their perceptions of the importance of serving local food at home and at school, and knowing where one’s food comes from (*not at all* to *extremely important*)*.* One open-ended question was included at the end of the survey for the parents to provide additional comments on food purchase and mealtime habits at home. Upon receiving IRB approval, the survey was delivered electronically to all parents through the preschool director in May 2018. Survey data were collected through the end of the month, and only one request to complete the survey was sent.

Of the 85 parents of the 45 children who had enrolled, 21 filled the consent form and responded to the survey (25% rate of return). It is not clear whether more than one parent from the same family completed the survey as their identities were anonymous. Survey data were analyzed using descriptive statistics.

## Results

The results are summarized and organized below to provide an understanding of parental perspectives.

## *Household Nutrition Behavior*

Tables 1 and 2 present the parent and child consumption frequency at home. Adults reported eating more kale than their children, but otherwise, both consumed many of the HOM foods at a similar frequency. Some popular HOM items represent broad food categories and do not specify a particular food variety, such as grains and leafy greens. Other commonly consumed HOM food items were apples and carrots, consistent with the information reported in the literature on children’s fruit and vegetable consumption (Fox et al., 2010). The least consumed HOM food items for families were summer and winter squash, beets, and lentils.

<Insert Tables 1 and 2>

There were limited reports on CSA participation and varied attendance at farmer’s markets. However, many parents reported growing their own food at home. Only 10% (*n =* 2) reported participation in a CSA, either for 1 or 2 or for 3 or 4 seasons. Nearly 50% of the parents (*n* = 10) reported attending a farmer’s market *very often* or *often,* with only one reporting never having attended one. Of those that did attend, some reported purchasing only one type of food item at farmer’s markets, typically vegetables, whereas others reported purchasing two or more types of food. Whereas 10% (*n =* 2) reported purchasing all five types of food items (animal proteins, grains, dairy, fruits, and vegetables), 71% (*n =* 15) reported maintaining a vegetable garden at home.

## *Parental Perceptions of Local Food*

Most parents responded saying that knowing where your food comes from (71%) was more important than serving local food at home (62%) and at preschool (55%) (Table 3).

<Insert Table 3 here>

Parents revealed that it is more important to serve local food at home than at preschool. While desiring to opt for healthy choices, parents experienced other challenges. In the open-ended response, one parent said, “We try to buy organic and local whenever possible. But we get busy and often do not do so. [The preschool director] emailed us a recipe for lentil muffins that looked great, but we have still not made time to try it. I think the HOM has had some impact, but our son is still focused on sweets and carbs. I see now that I could have keyed into this program more, to supplement the work on these things being done at school, at home.” Another parent said, “We try to eat local foods, but it is not mandatory. We eat what we can from our small garden. We encourage our children to try new food.”

## Discussion

This study adds to the literature by considering parental perspectives on nutrition behavior at school and home. Parents with children enrolled in a campus preschool provided their perspectives on HOM for ECE practices at home, including the procurement of local foods through farmer’s markets and CSA, gardening, and consumption habits. Consumption frequency among the 10 HOM foods surveyed suggests that a variety of food was served at home and that adults and children were mostly eating the same food. Despite HOM efforts to increase local food consumption, adults and children may not be eating HOM foods at the same frequency. Per the HOM goals, this programming may still be related to increased exposure to these local foods, which aligns with the well-cited strategy of repeat exposure to influence children’s food preferences (Cooke, 2007; Dazeley & Houston-Price, 2015; Laureati et al., 2014; Wolfenden et al., 2012).

The least consumed HOM foods (summer and winter squash, beets, and lentils) may not be easily available or may be both less familiar and less accepted by children and adults alike. However, lentils are the largest export crop in the state (Montana Department of Agriculture, 2018). One parent said, “My child identified lentils in a dish and taught me that (sic) how lentils look like,” thus indicating that the HOM educational strategies contributed toward children’s knowledge of local foods and the children brought this knowledge home. Impacts on children’s knowledge and attitudes toward local foods have also been reported in K-12 HOM studies (Margolin et al., 2018).

Parents’ limited familiarity with farm-to-school and varying consumption patterns for some HOM foods suggests challenges in their successful engagement, which is consistent with recent research findings on K-12 nutrition (Ickes et al., 2016). Although parents in this study expressed their interest in the procurement of local foods through farmer’s markets, CSA, and home gardening, research on food parenting suggests that interest alone does not always promote children’s healthy habits (Sano et al., 2019). These findings may indicate variations in food parenting knowledge and skills to expose children to new HOM foods. One parent said, “Everyone must try new foods at our house. We cook at home on 6 or 7 nights a week.” Encouraging mealtime experiences with local foods at home may help families overcome some of the challenges encountered in incorporating HOM foods into their menus through repeated exposure, thus increasing consumption.

## Limitations

Owing to purposeful sampling, self-reported data, and a small sample size, the findings of this study are limited to the participants and are not generalizable. It is not clear whether more than one parent from the same household participated in the study. Of the 85 parents who received the survey request, 21 (25%) responded. Additional research is necessary to generalize these exploratory findings to a wider population of parents and a larger number of ECE programs. The findings in this study indicated potential areas where wording clarifications in future research may capture a more precise understanding of the parents’ attitudes toward and the frequency of the procurement and consumption of local food. For example, there was a wide distribution in beef consumption in this study, perhaps because some families consume beef-like wild game. One parent said, “Most of our meat comes from hunting, which was not included in this survey. While we eat no beef, we regularly eat elk.” Another parent said, “We eat elk and buffalo, but not beef.” This indicated that they may have thought about beef-like wild game while reporting beef consumption. The survey did not offer any other opportunity to report wild game consumption.   
**Implications for Research and Practice**

This study adds to the literature by providing a better understanding of parents and children’s early eating patterns with respect to local foods and farm-to-ECE efforts. The findings of this study can be used to provide more opportunities for parent and family engagement in early childhood contexts.

The Center for Disease Control and Prevention (2015) uses a tri-fold approach in order to involve parents in K-12 school health. This approach aims to connect, engage, and sustain. According to the framework, connections with parents can occur through relationship-building opportunities such as extending invitations to attend school mealtimes and volunteering in food-related activities. With this framework, sustained HOM for ECE efforts for parental engagement can include sending newsletters home and soliciting their feedback to continually improve outreach.

This study indicated that HOM for ECE may benefit from additional parental involvement, including establishing family cooking nights with local foods and inviting parent volunteers to prepare HOM for ECE meals and snacks for the classroom. Exposure to HOM foods in multiple settings may be supported by identifying strengths and reducing barriers for families to purchase or produce local foods within the context of their individual communities (e.g., considering the length of the growing season, availability of local game, and knowledge of food preservation techniques).

Pilot research and HOM for ECE program development should be expanded to cover a larger number of sites across the state. Parental survey questions should be clarified in order to explore the quantity of local food that is purchased and consumed by the family (i.e., from gardening, hunting, or purchased from a farmer’s market, CSA, and/or grocers). Future research should test the feasibility, acceptability, and efficacy of strategies in order to increase parental engagement and explore ways in which these efforts can leverage parents’ desires and attempts to connect with HOM for ECE with a larger and more diverse population.

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References: