BEST PRACTICES GUIDE
MONTANA HARVEST OF THE MONTH

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INTRODUCTION

Montana Harvest of the Month

The Harvest of the Month program (HOM) showcases Montana grown foods in Montana communities. Each month, participating sites focus on promoting one locally grown item by serving it in at least one meal, snack, or a la carte offering, and displaying or distributing HOM materials. Additionally, schools and early care and education settings participate by offering taste tests to students and conducting educational lessons and activities.

Montana HOM is a perfect way to launch or grow a farm to school or farm to cafeteria program as it provides an easy framework to follow and ready-to-use materials. Participating sites receive a free packet of materials (includes posters and cafeteria, educator, and home handouts) as well as guides, additional resources, and training. The two primary goals for this program are to expose children and adults to new, healthy foods and to support Montana's farmers and ranchers.

This program is a collaboration between Montana Farm to School, Office of Public Instruction, Montana Team Nutrition Program, National Center for Appropriate Technology, Montana State University Extension, Gallatin Valley Farm to School, FoodCorps Montana, and Montana Department of Agriculture. Funds were provided in part by a USDA Farm to School grant, Montana Healthcare Foundation, USDA Team Nutrition Training grants, Northern Pulse Growers Association, Montana Department of Public Health and Human Services, Montana Pulse Crop Committee, Montana Specialty Crop Block Grant Program.

Project evaluation in the K-12 HOM program is led by Dr. Carmen Byker Shanks of the Food and Health Lab at Montana State University. Original artwork was created by Anthony Maughan.

Growing for Success

Growing for Success is a project of the National Center for Appropriate Technology (NCAT) beginning in October 2016 with the goal of increasing the sale of specialty crops to Montana institutions. This project builds on the successes and lessons learned from the school-based HOM program. Growing for Success seeks to expand HOM to the broader institutional community, particularly focusing on the vulnerable populations in hospitals and preschools & daycares, also known as early care and education (ECE) providers.

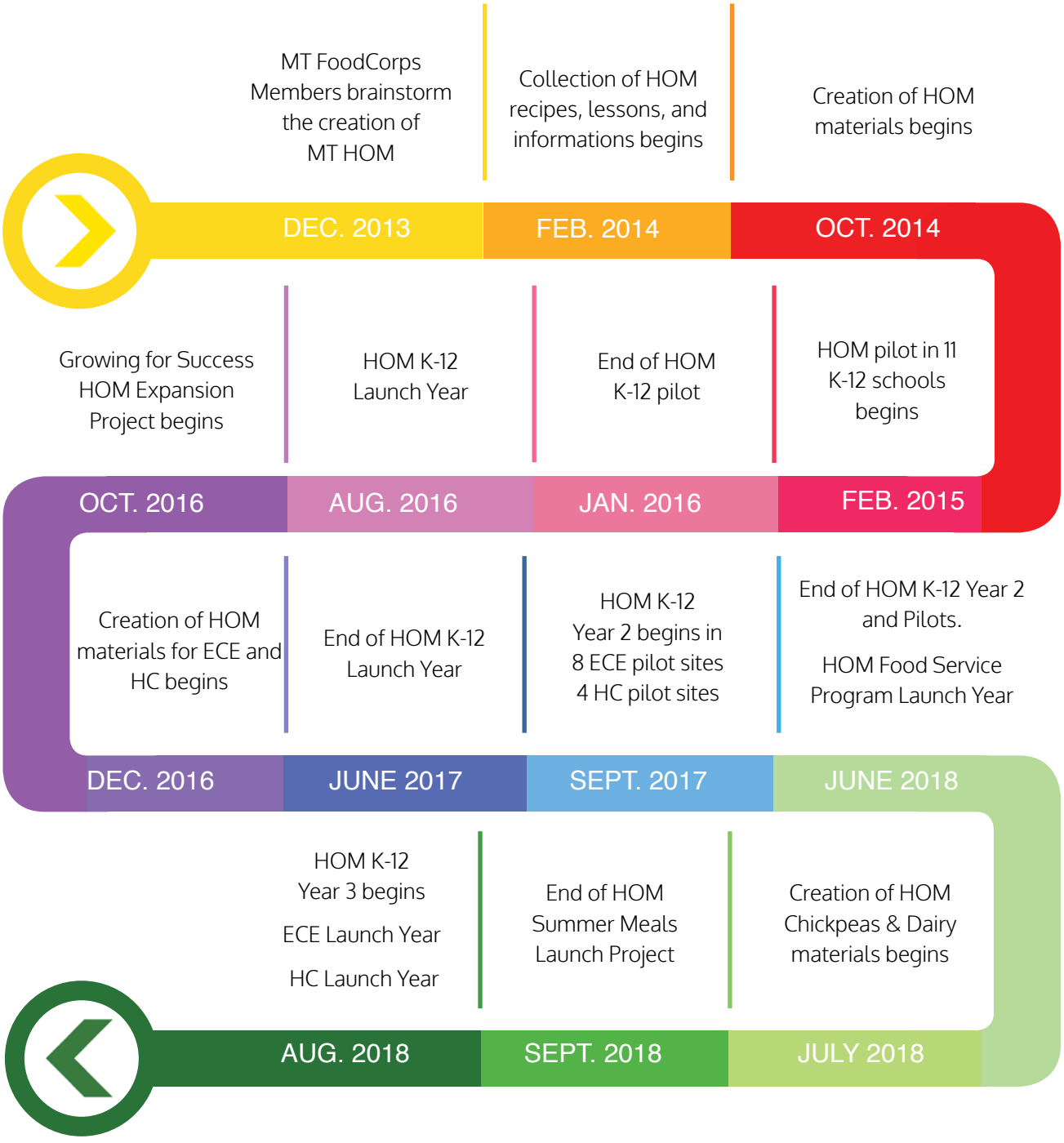
From conversations with healthcare and ECE providers in 20 communities with successful HOM schools, NCAT identified three communities for the in-depth HOM community pilot project: Livingston, Missoula, and Kalispell. NCAT convened community meetings every other month in these target pilot communities to ensure successful HOM programs and provided opportunities for stakeholders to troubleshoot specialty crop sourcing, as well as to meet potential vendors and discuss distribution and purchasing partnerships.

Healthcare and ECE stakeholders formed teams, helped with the creation of new HOM materials, and implemented HOM with these materials in 4 healthcare institutions and 8 preschools. Materials provide recipes, promotional materials, and a calendar for featuring Montana specialty crops, and encourage regular purchasing for taste tests and meals.

Farm to Cafeteria Network

The Farm to Cafeteria Network (FCN) is a group of Montana food producers, processors, food service professionals, and community members who collaborate to share best practices and resources about farm to cafeteria programs across the state. FCN's mission is to support vibrant sustainable local communities, economies, and people by increasing the amount of healthy, locally-grown food served in public and private institutions in Montana.

TIMELINE



HC = Healthcare

ECE = Early Care and Education

PROJECT OUTCOMES

Metric	K-12 Schools & Afterschool Programs	Early Care & Education Providers	Healthcare Institutions
Number of participating sites	• 11 pilot sites (2015-16) • 140 state launch sites (2016-17) • 135 2nd year sites (2017-18) • 134 3rd year sites (2018-19)	• 8 pilot sites (2017-18) • 25 state launch sites (2018-19)	• 4 pilot sites (2017-18) • 8 state launch sites (2018-19)
Dollars spent on local foods	• $297,342 spent (2015-16) • $498,834 spent (2016-17) • $621,008 spent (2017-18)	• $2,615 spent (2016-17) • $3,246 spent (2017-18)	• $350,000 spent (2016-17) • $376,975 spent (2017-18)
Number of local food vendors utilized	• 99 Vendors (2015-16) • 131 Vendors (2016-17) • 134 Vendors (2017-18)	• 17 Vendors (2016-17) • 28 Vendors (2017-18)	• 18 Vendors (2016-17) • 25 Vendors (2017-18)
Number of people impacted	24,480 students (2016-17)	430 children (2017-18)	2900 clients/patients/ family members (2017-18)

STAKEHOLDER NEEDS AND OPPORTUNITIES

In the past seven years of NCAT's experience establishing and working with the FCN, we have found that Montana's **institutional foodservice operations (IFOs)**, with combined annual food purchases of approximately $33 million (McLeay & Barron, 2006), represent an economically important, yet largely untapped market for Montana farmers and ranchers. Additionally, of Montanans' $2.6 billion annual food budget, $295 million goes to fruits and vegetables to be eaten at home, representing a relatively large market opportunity for specialty crop sales in the grocery marketplace (Meter, 2011). For buyers and consumers of fresh produce, purchasing from small and local farms provides both access to fresh foods and the potential for a host of socio-economic benefits (Boys and Hughes, 2013). Improving producers' access to expanded market opportunities produces a positive ripple effect in economic, environmental, social, and agricultural sectors.

In order to capitalize on this opportunity of increasing specialty crop sales to IFOs and grocery stores, this project addresses the following three needs:

Producers need support in accessing IFO markets

Due to requirements specific to these markets and recent food safety regulations, many producers need guidance on how to navigate this marketplace. A 2017 study by Boys and Fraser uncovered suggestions by producers for the development of new market coordination tools that would enable direct communication with potential IFO buyers about which specialty crops fit buyers' needs and menus so that producers could plan accordingly.

Involving both producers and buyers in the FCN increases their access to direct lines of communication with potential expanded markets through HOM. Montana producers have increased market coordination and greater opportunity for sales agreements and/or forward contracts through the recommended HOM calendar, Farm to Cafeteria Database, and other program resources that are utilized by participating HOM sites.

Additionally, producers have greater knowledge on food safety, institutional buying standards, and the resources and models needed to sell specialty crops to institutional markets through NCAT's producer resource (webinars, print materials, and electronic materials) development and dissemination.

IFOs need an easy approach to starting and growing their farm to cafeteria programs

With growing momentum in "farm-to-table" initiatives, IFOs show increasing interest in purchasing from Montana producers, yet often find entering this market to be a challenge. Most IFOs purchase food under contract through large national distributors, whose products are sourced nationally rather than from Montana. Purchasing and preparing local foods usually takes extra effort for busy food service staff. Furthermore, while marketing constraints vary by product, other factors such as seasonality of production, meeting quantity requirements, price competition, logistical delivery considerations, and food safety requirements can further limit farmers and ranchers from supplying institutional markets (e.g. Vogt and Kaiser, 2008; Feenstra et al., 2011; Harris et al., 2012). Despite these challenges, food service staff are interested in local procurement and are looking for ways to increase meal participation through offering locally grown and nutritious foods year-round.

HOM provides an easy-to-use framework to start or grow farm to institution programs. HOM has quickly become Montana's leading program for aiding IFOs in starting and growing their local purchasing while receiving recognition for those efforts through the take-home materials and classroom lessons. Reports from participating sites show that sites are not only purchasing Montana grown specialty crops for the required once monthly meal, but are continuing to purchase these items and incorporate them into weekly, and sometimes daily offerings.

Currently, the majority of farm to institution programs in Montana focus on farm to school (K-12) programs. Growing for Success provides an important contribution through a broader consideration of farm to institution marketing channels that includes on healthcare institutions and early care and education providers.

Summary of HOM Comparisons

Research of HOM programs in Texas, California, and Vermont have allowed us to comparatively analyze the objectives, interventions, and outcomes of these programs and Montana HOM (see Appendix for Comparative Analysis). While all programs hold similar objectives, each implements different interventions and yields different outcomes as a result.

Challenges in this comparative analysis are not having access to specific data and outcomes, as well as each significant differences in each program's population size, demographics and distance to local producers.

Objective 1: Increase local food promotion

- Dallas Independent School District (ISD) shows the clearest growth trajectory, likely due to the localized focus on the singular school district through a USDA Farm to School Grant funded initiative, with significant organizing being done at the local level.
- California's Community Alliance with Family Farmers (CAFF), focuses on Sonoma County almost exclusively and provides direct access to farmers through aggregating and distributing produce for taste test boxes. While impressive in its scope, this project proved to be ultimately unsustainable.
- Vermont's program is the longest running and perhaps offers a good look at a sustained purchasing level from schools due to a well-coordinated forward planning structure with participating area farmers.

Objective 2: Increase student and community knowledge of food and nutrition

- Dallas ISD was able to ensure hands on involvement with a school garden, and thus produced exceptional qualitative results.
- California's CAFF offers an in depth HOM-centered curriculum, as opposed to the monthly materials offered by Montana HOM. Overall, this approach is well received by educators for the structure it provides .
- Vermont is the most hands off with the collection of evaluative data. However, the development of a taste test kit proves to be a good tool in Vermont's HOM program and is recommended for all HOM programs.

Objective 3: Collaborate across sectors to successfully implement HOM

- Dallas ISD is a clear leader in team building due to the narrow focus of their project.
- Meanwhile, Vermont and CAFF HOM programs demonstrate strong connection to producers, either through close work with producers to meet the needs and orders of the schools, or direct purchase and resale of products through HOM, respectively.
- Montana excels at building school level teams, but should adapt in the future to working more closely with producers to meet the needs of schools.

LESSONS LEARNED

From July 31 through mid-August 2018, project evaluator Al Kurki conducted 10 interviews with key staff of the HOM pilot project organizations. This included one hospital or long-term care facility and two daycare centers in Kalispell, Missoula, and Livingston. The food service manager of an advanced care hospital in Billings was also interviewed because of that facility's participation in the pilot.

The interviews covered specific strengths of the pilot effort and how the project could be improved in the future. The interviews also covered technical, process-related matters, such as frequency and format of e-mails. What follows are the major lessons learned, from the perspective of the pilot project participants themselves.

1. The consensus across all the interviewed project partners was that the HOM pilot provided:
   - An excellent focal point for both nutrition education and local, fresh food purchasing of Montana-grown specialty crops.
   - A structure within which to conduct HOM that could be modified for the both clients and the facility.
   - Materials that were attractive, and "ready-to-go" in many settings.
   - A new way for institutions to come together on healthy foods
2. The hospitals and assisted living facility have more staff and infrastructure capacity to conduct HOM than ECE centers. ECEs often had small kitchens, served only snacks and no meals.
3. Procuring HOM Montana grown specialty crops was challenging for large buyers like the hospitals. This was in part due to supplies affected by weather and crop failures. Hospitals served HOM foods at high volumes and frequencies which made tracking sales – in some instances – a difficult task.
4. Hospitals found all the HOM materials very usable. One suggestion for improvement was to have short, bullet-point style materials for certain staff groups, such as clinicians, nurses, dietitians. These materials could be presented at hospital staff meetings.
5. A plurality of all interviewees said greater exposure of HOM through social media and conventional outlets would build visibility of HOM and possibly engagement in it. A least a few ECEs saw Facebook as the way to reach and engage parents of the children being served.
6. There was consensus among ECE providers for wanting more age-appropriate HOM lessons. ECE teachers said they were able to modify the materials for use with kids from 2-6 years old, but it was a challenge. They also pressed for more pictures and story books, around which a piece of the featured food story could be told. Two providers mentioned that 2-3 minute videos on how food is produced – using kids' voices – would be very useful.
7. ECE providers were interested in an online forum for interacting with peers involved in other pilot sites. This forum would allow them to share ECE-unique recipes, lesson, challenges. There was a split among ECE providers on frequency of community meetings within the pilot project. Some found it very beneficial to engage with others in the community on HOM. Others said that the meetings were burdensome and not always germane to their situation.

BEST PRACTICES

The healthcare and ECE pilots showed HOM to be an effective tool at increasing sales of Montana grown specialty crops. This was demonstrated in institutions with no prior purchasing history beginning to source Montana grown specialty crops, and institutions that were already serving Montana grown specialty crops boosting their sales and thereby their purchasing. Pilot sites also reported the use of our well-designed and attractive materials also to an excellent focal point for both nutrition education, and education about the local and fresh specialty crops that were being served.

Building community level interest and capacity for implementing HOM is critical

The time intensive quarterly community meetings that were conducted in 2017-2018 were an effective way at creating cross-sector collaboration on implementing and promoting HOM. However, the food service staff, who are passionate about local sourcing, tend to also be extremely busy. These meetings were not an effective way to train on procurement practices and scaling up institutional kitchen capacity, largely due to the variety of stakeholders present. In-person and/or recorded training opportunities that are specific to and convenient for food service staff are recommended to fill this need.

Additionally, from these community meetings, we learned that incentives for this sort of deep-dive participation are appreciated. Often, meetings required staff time from participating organizations and offering honoraria would have promoted greater participation and cross-sector collaboration.

Greater involvement of producers and distributors in strategic planning and training is necessary for growing programs like HOM

Through the pilot project, we learned from conversations with western Montana growers that while selling to institutional markets is a priority, accessing the grocery store chains is their current big challenge for reaching more Montana consumers. We recommend research into selling to specific Montana grocery store chains.

Fitting impactful trainings on market expansion and coordination tools like HOM into existing agricultural gatherings' can be difficult. We recommend hosting a standalone training or networking opportunity for producers.

Other states' approaches to HOM often include direct relationships with the producers, aggregators and/or distributors that supply HOM foods. Many HOM sites state difficulty in obtaining certain HOM items in their area. Although Montana HOM supplies materials for supporting education, as well as guides for local purchasing and lists of potential vendors through the Farm to Cafeteria Database, it does not work to address supply chain issues. We recommend a project focus on expanding distribution resources, and increasing the knowledge of available distribution resources and processors to institutional food buyers.

NEXT STEPS

Farm to School Grant

Montana is a rural and agricultural state. Despite Montana agriculture being a $4 billion industry, one in seven Montanans struggles with hunger. The Montana counties containing Native American tribes have some of the highest food-insecurity levels in the state, with rates as much as 8% higher than the state average. To reduce these numbers, communities can improve their food security by increasing their connections to local and regional food producers. By using farm to school (F2S) distribution systems as a path toward that goal, whole communities will benefit by these improved distribution networks. Stronger F2S programs will improve food distribution to local and regional grocery stores, hospitals, school districts, and other institutions.

The goal of this two-year project is to increase local food distribution and procurement to K-12 schools in Browning, Fort Benton, and Malta, whose F2S stakeholders are in the early stages of implementing F2S with district level interest but no active F2S team that is unified by F2S goals. Our project will provide ongoing training for F2S stakeholders in each of these communities – sharing best practices, meeting their individualized needs, providing resources and materials, and more. We will be supporting operations by establishing Community Teams that will work together during and after the grant period to engage in short and long-term planning to achieve shared F2S goals. By providing $2,000/year ($4,000 total per school) for supplies, each of the three schools will be able to purchase equipment and supplies that will support the development of their F2S program.

Growing for Success Part 2

Growing for Success is a NCAT project to increase the sale of specialty crops to Montana institutions. Growing for Success is building upon upon the successes and lessons learned from the initial school based HOM program. The project has adapted and piloted materials that promote Montana grown specialty crops in healthcare institutions and ECE programs. In 2018-2019, NCAT will step up the project from the pilot that solely affected three Montana communities, to a full scale launch providing HOM materials to healthcare institutions, preschools, colleges, grocery stores, and other community businesses and organizations around the state. Additionally, this project will include specific research into best practices. The project will also provide training on marketing to chain grocery stores in Montana, including the development of HOM materials for this environment. This project will expand the markets that are affected by HOM and will also expand the number of producers affected by adding two new HOM material sets for cherries and chickpeas.

APPENDIX: COMPARATIVE ANALYSIS

Objective 1: Increase local food promotion

	Montana	Texas	California	Vermont
OBJECTIVE	Increase local foods purchased, promoted, and served across participating Montana institutions.	Expand farm to school and increase produce purchased locally	Increase local food consumption by connecting growers to their communities through farmers' markets, food retail stores, schools, food banks, etc.	Promote the use of local, seasonal Vermont foods through the provision of ready to go materials for the classroom, cafeteria, and community.
INTERVENTION	The program provides free resources to promote HOM (1 set of posters, a cafeteria flyer, teacher flyer, and home flyer) as well as resources on how to find and communicate with local producers.	The program seeks out local sources for menu items and implement them in HOM initiative.	Schools pay $15 for a tasting kit, including curricula and produce purchased from local farmers by CAFF (HOM program coordinator). CAFF uses FEED Sonoma, a local aggregator/ distributor for all of the produce that they sell through HOM.	Schools pay a membership fee of $25 to participate for the year. Encourage taste tests and HOM features on the school menu. Collaborate with Green Mountain Farm Direct to supply produce.
OUTCOMES	During the 2015-16 school year, participating sites spent ~$300,000 on Montana grown foods. During the 2016-17 school year, participating sites spent ~$500,000, 60% more than the previous year. During the 2018-19 school year, participating sites spent ~$600,000, 20% more than the previous year.	During 2014-15 school year, Dallas ISD spent $73,753.36 on local foods. During 2015-16 school year, Dallas ISD spent $137,484.48, 86% more than the previous year. During 2016-17 school year, Dallas ISD spent $211,883.50, 54% more than the previous year.	Unable to obtain data on economic impacts. Reaches nearly 1.5 million students (pre-kindergarten through grade 12) and 1.4 million adults annually since 2004. CAFF ran HOM since 2009 (2012 in Sonoma Co.) and is making big transitions with the program in 2018 because it wasn't cost effective.	In 2014-15, $12,759.50 was paid to producers and total sales stood at $15,949.38. In 2015-16, 10,257.00 was paid to producers and total sales stood at $12,821.25. In 2016-17, $12,346.50 was paid to producers and total sales stood at $15,433.13. In 2017-18, $9,835.50 was paid to producers and total sales stood at $12,294.38.

Objective 2: Increase student and community knowledge of local food and nutrition

	Montana	Texas	California	Vermont
OBJECTIVE	Students will increase their knowledge in nutrition, agriculture and food	Students will learn and experience how to grow, harvest and prepare fresh produce. Students will also learn about the physical and nutritional benefits of gardening	Motivate and empower students to increase consumption and enjoyment of a variety of colorful fruits and vegetables and to engage in physical activity every day	Educate students on local food, market local food, and support Vermont farms.
INTERVENTION	Handouts offered to registered sites include a lesson plan for elementary-aged audiences, recipes, fun facts, cooking tips, and children's book ideas Sites should conduct at least one taste test in a cafeteria or classroom each month and submit voting results using the Tried It, Liked It, Loved It voting system.	School gardens activities were incorporated into lifetime nutrition & wellness classes, school garden clubs and agriculture classes. Lessons were focused on providing students with project-based experiential learning.	The five monthly elements based on the Social Ecological model is used to influence behavior. Monthly elements include an educator, family, and community newsletter, menu slick, and press release. New curricula were released for grades 4, 5, and 6, combining HOM information and an activity based on USDA guidelines.	Free resources are provided to registered sites, such as general information about harvest items, worksheets and curriculum to support educators in incorporating HOM. A taste test toolkit includes 1 set of 13 posters, ballot boxes and chips for recipe voting, "I Tried It' stickers, and a wall calendar.
OUTCOMES	Participation in 2015-2016 was ~21,000 and increased to ~25,000 in 2016-17. Registered sites reported increases in addressing essential healthy eating topics through health education curriculum. Pilot survey revealed that children improved their attitude toward HOM foods, while non-HOM foods did not show a significant increase in positive reception.	Testimonials of students revealed an increase in fruit intake and select vegetables that they hadn't tried before. Students are also able to select as many servings of fruits and vegetables as they would like, increasing fruit and vegetable as a result.	In 2016-17, 94% of students reported that after 9 months of being in the program, they like trying HOM fruits and vegetables. 87% of students know that eating fruits and vegetables every day can give them more energy to play. 78% of students know that their favorite fruit grows on a plant before they get to eat it.	In 2015-16, 15,386 individuals tried HOM items and 8229 voted 'Thumbs Up.' In 2016-17, 14,040 individuals tried HOM items and 8489 voted 'Thumbs Up.'

Objective 3: Collaborate across sectors to successfully implement HOM

	Montana	Texas	California	Vermont
OBJECTIVE	Each participating site builds a team for supporting wellness. HOM implementation at the state level builds collaboration between many partners and stakeholders.	Establish working relationships with various school and community partners with the same goals and mission as Dallas Independent School District, Child Nutrition Services.	Expand familiarity with California grown fruits and vegetables, local farmers, the state's rich agricultural bounty, and how food travels from the farm to our plates through increased collaboration with growers.	Partner with Green Mountain Farm to School, Food Connects, and Vital Communities to connect local food and farms to the classroom and cafeteria.
INTERVENTION	Each HOM-registered site is required to establish a team. State level HOM advisory committee holds meetings.	Dallas ISD performs a needs assessment and develop a plan together for how to strengthen school gardens and farm to school district wide.	CAFF arranges field trips and other special promotions with local farmers' markets or farms.	Collaborate, promote local distributors, coordinate ordering and share network resources.
OUTCOMES	In 2016-17, 106 sites submitted HOM reports, with 94 of those sites staying on for the 2017-18 year. In 2017-18, 24 new sites participated (total of 118 engaged sites),with 111 of those sites staying on for the 2018-2019 year. 61 of the sites have remained active with HOM from 2016-19. 36 new sites have been recruited in these 61 existing HOM site communities.	Due to strong team-building in this project, all schools that were previously involved with their Farm to School Grant will continue with farm to school activities, and school garden to cafeteria program during the 2017-18 school year.	CAFF improved relationships with partner farms, offering farm profiles which gave schools opportunities to connect to their food source. CAFF featured Monthly Elements for 36 California grown fruits and vegetables.	As of 2015, more than 60 of Vermont schools were already participating in HOM and a growing number of stores, preschools, and senior centers. Production planning and market coordination with producers provides market access and stability for farmers.

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