



INDIGENOUS FARM TO SCHOOL PROGRAMS:

A Guide for Creating a Farm to School Program in
an Indigenous Community



Created by Kaisa Jackson
and The White Earth Land Recovery Project



TABLE OF CONTENTS

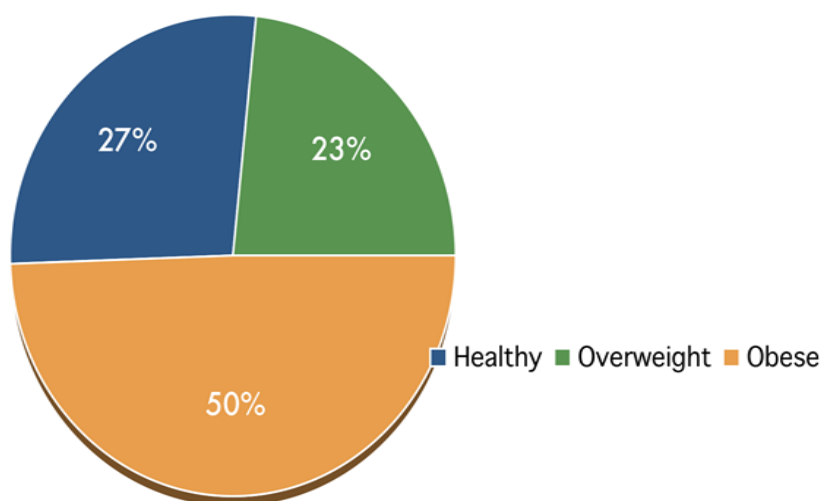
About Us	2
Overview: State of Indigenous Food Crisis	3
Health	4
<i>Obesity and Related Health Issues</i>	4
<i>Attention Deficit Hyperactive Disorder</i>	5
Disconnect From Foods	6
<i>Nature Deficit Disorder</i>	6
<i>Colonization</i>	7
<i>Re-traditionalizing and the Health Benefits of Traditional Food</i>	7
Economics	9
<i>Food Deserts and Food Insecurity</i>	9
<i>Keeping it Local</i>	10
Evaluating Community Need	12
Look at Statistics	12
Assessment Tool	13
Launching	14
When Should a Program Start?	14
Making Goals	14
Finding Growers	15
Regulations	15
Staffing	16
Communicating within the School system	17
Surveying	18
Menu Planning	19
Pricing	20
Educational activities	21
Funding	22
Sustaining: Growing what has been started	22
Relationships	23
Staff Assessment	24
Continued Funding	25
Evaluation	25
Appendix:	
1: Indigenous Heritage Corn Varieties	26
2: Regulation Resource Sheet	27
3: Example Lunch Menu	29



About Us

The people of White Earth were starving. Not for something edible but for actual sustenance, for actual *food*. The regular diet, much like the options in many impoverished communities, lacked real, un-dyed, and unprocessed options. It also lacked ties to the land, to the idea of growing one's own food, and especially lacked ties to Anishinaabe culture. Since the time we were founded in 1989, the White Earth Land Recovery Project has recognized the overwhelmingly critical food state on the White Earth Reservation. After long continued efforts to improve the lives of our community's youth with various gardening and cultural projects, our farm to school program was implemented in 2008. The farm to school program was introduced at a time when 35% of the adult population of the White Earth community was suffering from Type 2 Diabetes. The children were also facing unprecedented health risks with Indian Health Services recording a 70% increase in childhood diabetes and obesity. The White Earth community of focus for the proposed farm to school program, Pine Point Elementary School, for the purpose of the farm to school program, reported that 89% of the students at the school qualified for free meals through the federal school breakfast and lunch program and another 8.5 % qualifying for reduced-price meals. There was great potential not just to reverse these trends in declining student health but to also positively impact our students' overall lifestyle choices by providing locally grown and traditional foods.

Pine Point School Children 8th Grade BMI Index



1

¹ Note: Graph based on research by Shane Plumber, 2007/2008. Shane is currently a wellness consultant for the Minnesota Department of Health where he works with American Indian tribes in Minnesota, and a law clerk at Regional Native Public Defense Corporation.



The need for a farm to school program did not end in the Pine Point community. Since our program launched in 2008, we have added two new schools, the Nay Tah Waush Charter School located in the northern part of the reservation and the Circle of Life Academy located in the village of White Earth in the center of the reservation, to our focus. We have worked with over 50 growers from our own community and close farming communities and have served more than 60 foods (naturally or organically grown, no known use of pesticides) including bison, wild rice in various forms, fresh berries, and squash— just some of the foods that came from the traditional diet of the Anishinaabe people.

It was our hope that efforts like a farm to school program would improve the health of our school children, revitalize White Earth's local economy and reintroduce Anishinaabe food traditions and practices. We intend to re-traditionalize our relationship with growing, preparing, eating, and talking about food as well as work to familiarize and motivate our children with the same heritage foods that were given to us and are a part of our stories and traditions. These practices will lead to the overall success of our children here on White Earth as healthy, happy, and culturally rich Anishinaabe people.

Overview: State of Indigenous Food Crisis

It is important to understand that while a farm to school program would be a benefit to any school or community, introducing a farm to school initiative in an indigenous community will be quite unique. Indigenous groups and communities are affected very differently than other communities regarding issues of health, access to food, strong economic systems, and connection with history and culture. Currently, the National Farm to School Network reports that 12,429 schools in the U.S. have adopted a farm to school model and the efforts of those schools have reached over 5,746,400 students.² There are no numbers indicating how many of those schools serve Indigenous populations but as programs continue to grow across the U.S. for Native students, more telling data will become available.



Above: Pine Point Student enjoying some fresh farm to school options.

² *National farm to school campaign.* (2012). Retrieved from <http://www.farmtoschool.org/>



Health

In January 2012, the issue of health in America's children became a matter discussed heavily by the U.S. government. The U.S., known for being the most obese and one of the unhealthiest countries of the developed world, inspired First Lady Michelle Obama with the help of Agricultural Secretary Tom Vilsack, to announce a new meal plan as a component of the First Lady's *Healthy, Hunger Free Kids Act*.³ For the first time in U.S. history, the new campaign approved by President Barack Obama is working to address the nation's health epidemic as it relates to food by making changes to breakfast and lunch menus. The truth is that our nation does suffer from an unhealthy food epidemic. And with the backing of top government officials to support the health needs of our unhealthiest communities, now is an opportune time to create more farm to school programs serving Native populations.

Obesity and Related Health Issues

"In 1989, a study by the Government Accountability Office reported that the prevalence of obesity, diabetes, heart disease, and hypertension was 'likely to continue' unless federal food packages distributed to Native Americans are improved. Commodity foods often form the basis of many people's diets...With their unusual ingredients and additives, processed commodity foods introduced a whole new diet to Native communities, a diet that their bodies were not necessarily meant to manage. It is 'widely recognized that the replacement of indigenous foods with a diet composed primarily of modern refined foods is the centerpiece of the (diabetes) problem.'"

– Winona LaDuke & Sarah Alexander, *Food Is Medicine: Recovering Traditional Foods to Heal the People*, pp. 5-6.

In the United States alone, more than one-third of U.S. adults (35.7%) are obese.⁴ This number is cause for alarm and was likely the driving force behind the First Lady's healthy food mission for our children. But what is more shocking is that American Indian/Alaska Native

³ USDA unveils historic improvements to meals served in America's schools. (2012, January 25). Retrieved from <http://www.fns.usda.gov/cga/PressReleases/2012/0023.htm>

⁴ Ogden, C. L., Lamb, M. M., Carroll, M. D., & Flegal, K. M. (2012). Retrieved from Centers for Disease Control and Prevention website: <http://www.cdc.gov/obesity/data/adult.html>



women, for example, are 70% more likely than White women to be obese.⁵ Unfortunately, there is more to obesity than just excess pounds. Obesity is hard on our hearts and makes our bodies work harder than they can for as long as we need them. Known to also cause type 2 diabetes, obesity can claim lives and is more than two times more common among American Indian/Alaska Native children (31%) than among white (16%) or Asian (13%) children⁶. Data from the USDA in 2008 shows that 20 percent of American Indian children (2 to 4 years old) participating in WIC are obese. For those American Indian children living in areas served by Indian Tribal Organizations (ITOs), obesity prevalence increases to 22 percent.⁷ Compared to any other racial or ethnic group, Native American children suffer the most. As it stands in the United States, American Indian/Alaska Native adults are over twice as likely as white adults to be diagnosed with type 2 diabetes.⁸ This potentially deadly progression from childhood to adulthood as an American Indian person, if not actively interrupted with efforts to reintroduce healthy and culturally familiar food, will continue into a cycle and will be played out for generations upon unhealthy generations to come.

Attention Deficit Hyperactive Disorder

Some have argued that the dyes in many modern foods subject to commercial processing and additives such as high fructose corn syrup add to the reasons why so many children are being diagnosed with Attention Deficit Hyperactive Disorder (ADHD). According to the American Medical Association, a report from the Centers for Disease Control and Prevention shows the number of U.S. children ages 5 to 17 diagnosed with attention-deficit/hyperactivity disorder climbed about 32% during the past decade.⁹ Those numbers are still high and climbing in Native Communities. According to Ann Cooper, a food advocate and chef, more than 2.5 million children have been diagnosed with Attention ADHD and an additional 15 percent of children have borderline hyperactivity or behavioral issues. During our research we discovered nearly 100 studies validating the hypothesis that food dyes and

⁵ The United States Department of Health and Human Services. , T. O. O. M. H. (2012). Retrieved from <http://minorityhealth.hhs.gov/templates/content.aspx?ID=6457>

⁶ *Let's move: the facts for american indians and alaskan natives*. (2012). Retrieved from [http://www.letsmove.gov/sites/letsmove.gov/files/Let's Move Fact Sheet for American Indian Alaska Native.pdf](http://www.letsmove.gov/sites/letsmove.gov/files/Let's_Move_Fact_Sheet_for_American_Indian_Alaska_Native.pdf)

⁷ *Addressing child hunger and obesity in indian country: report to congress*. (2012, January). Retrieved from <http://www.fns.usda.gov/fns/tribal/documents/IndianCountrySummary.pdf>

⁸ U.S. Department of Health and Human Services. (2010, September 14). *The office of minority health*. Retrieved from <http://minorityhealth.hhs.gov/templates/content.aspx?lvl=3&lvlID=5&ID=3024>

⁹ Moyer, C. (2011). *Adhd rises 32% among children and teens*. Retrieved from <http://www.ama-assn.org/amednews/2011/08/29/hlsb0902.htm>



additives are a factor in attention and behavioral disorders and can increase the incidence of ADHD. In one of those studies 73 percent of the children placed on a diet free from chemical additives, dye and artificial sweeteners showed a reduction in hyperactivity and an increase in attention.¹⁰ By introducing foods free of additives, farm to school programs have an opportunity to positively influence the students' behaviors and the way school itself is experienced. The health and educational wellbeing of American Indian students could be changed for the better.

Disconnect From Foods

Nature Deficit Disorder

As a nation, we suffer from another deficit that is more difficult to quantify. The lack of connection to the food we are consuming and the lack of connection to the land it grows in makes us all individuals living with something called 'nature deficit disorder'. It is unfortunate that most people in the United States know more about ipads and smartphones than they do about gardening for their climates or even how to identify the wild plants of their region. This nature deficit disorder, though something that we experience together as a nation, seems to be most intense for the youth of today. This knowledge held for countless centuries about how to tend to the land, understand the land, and respect it now has to compete with a myriad of bombarding modern conveniences for attention. Much of this knowledge of our natural world also becomes lost with the passing of our eldest generations. This disconnect from the land can also be attributed to many of the aforementioned health issues that we as a nation and our youth suffer from. Richard Louv is often credited with providing thorough understanding of nature deficit disorder. Louv is careful not to suggest that nature deficit disorder is a verifiable medical condition. Rather, it is the name he gives to the disturbing trend that does indeed have health implications, particularly for children, such as diminished use of the senses, attention difficulties, and higher rates of physical and emotional illness.¹¹ Nature



Above: Pine Point students enjoying their visit to a local farm

¹⁰ Cooper, A., & Holmes, L. (2006). *Lunch lessons: Changing the way america feeds its child*. (p. 7). New York City: First Collins.

¹¹ Tucker, P. (May 01, 2006). Curing "Nature Deficit Disorder.". *Futurist*, 40, 3.)



deficit disorder as a social condition acknowledges nature as an essential ingredient to a healthy childhood. A farm to school program in a community largely suffering from nature deficit, i.e. a school, will actively work to mend the lost connection between individuals and the land by recognizing that without knowing about the land and without understanding and respecting it, we will, in essence, starve or continue on the path of sickness and disease.

Colonization

There was a time when Native people were not plighted with cancers, heart disease, obesity, or diabetes. In the overall timeline of our existence as Native peoples, that was a relatively short time ago. It did not take long after the arrival of Europeans in 1492 and the continued expansion westward over what would be the next 500 years to almost completely transform the way American Indian peoples eat and experience food in relation to the land. It did not happen by chance either. The goal of colonization is to dominate a new place and the people there in an attempt to take political and social control at permanent facets of the new land while still maintaining political and social ties with their home country. That political and social control is what has caused hurt for Indigenous people. The changes made by colonizers coming to the United States are incalculable in number. But in talking about food, it is necessary to address the colonization of indigenous foods. Looking at history, the diets of Indigenous people were once much higher in complex carbohydrates and lower in fat than current diets and primarily made up of natural foods. This was also a time before dyes, high fructose corn syrup, preservatives, and the added hormones that people on reservations and in Native communities are subjected to. The USDA acknowledges that there has been a shift in Indian Country, whereby American Indians are eating less traditional food and more foods that are commercially prepared and processed.¹²

Re-traditionalizing and the Health Benefits of a Traditional Food

But can it be fixed with serving broccoli alone? The more fresh foods a farm to school program is able to bring to students, the better. This is true. But what extends even further in terms of cultural health and success is reintroducing traditional foods to Indigenous communities. “Re-traditionalization” occurs as in the emphasis on reviving and preserving heirloom varieties of plants and livestock, and in movements seeking return to indigenous foods.¹³ A diet made of up traditional foods has proven to improve the overall health of Native

¹² Addressing child hunger and obesity in Indian Country: Report to congress. (2012, January). Retrieved from <http://www.fns.usda.gov/fns/tribal/documents/IndianCountrySummary.pdf>

¹³ Sobel, J. (1999). *Social change and foodways*. Retrieved from http://oregonstate.edu/instruct/nutr216/ref/symposium_sobel.html



peoples. Many Indigenous communities have traditionally sustained themselves with diverse varieties of beans, corn and squashes (for a diagram illustrating different Indigenous heritage corn varieties, some of which are grown by the White Earth Land Recovery Project, please refer to appendix 1.) Research in various parts of the United States has shown that an Indigenous diet of minimally processed, locally produced foods has a positive effect on the health of those communities, in contrast to the “reservation diet” of white flour, sugar, and processed food. An example from a study conducted by the University of Minnesota about hominy corn, Arikara squash, and Potawatomi lima beans. The results indicate that corn, squash, and beans, without the common side effects of prescription drugs, improve the regulation of blood pressure and blood sugar through processes called “enzyme inhibitory activities” upon digestion.¹⁴ Studies by the University of Minnesota on traditional foods grown in the tribal gardens found the

following:



- Hominy corn is high in carbohydrates and protein. One serving of hominy yields 47% of the Daily Reference Value (DRV) for fiber and 33% of the B vitamin Thiamine and has half the calories of market corn.
- Arikara squash has 13% of the DRV for fiber, 64% of the DRV for vitamin A, and half the calories and double the calcium and magnesium of the market equivalent.
- Potawatomi lima beans are low in fat, and high in carbohydrates and protein. B vitamins are found in abundance, including thiamine, pantothenic acid, niacin and B6. Potawatomi lima beans also provide 24 grams of fiber per serving, and 21 times the antioxidants found in market beans.

Above top: “Cool Old Squash” grown from 800 year old heritage seed. Above Bottom: Pink Lady heritage corn to be made into hominy.

¹⁴ Dwyer, E. (2010, April). Retrieved from http://www.farmtoschool.org/files/publications_447.pdf



Part of re-traditionalizing is education in addition to eating the traditional heirloom foods. Some farm to school programs also choose to incorporate an educational curriculum that corresponds with certain traditional foods and the season. This way, Native children can become more familiar with Indigenous traditional foods on their lunch trays, but students can also learn how to grow them, harvest them, and *talk* about them in relation to their own communities. The educational component of an Indigenous farm to school program is the water that really grows the seed of understanding. When children learn how to appreciate their food, they can eat better, be healthier, and pass on those age-old traditions.

Economics

Food Deserts and Food Insecurity

The money made in the business of food and food production is not made by Native communities. This, of course, is not because Indigenous communities are unable—quite to the contrary—Indigenous communities could be very successful in creating stronger food economies. The problem is, great work has gone into regulating the food economies in Indigenous communities and has been done through a lens of colonization—controlling political and social systems. For many years, commodity foods were staples in Native communities, doled out by the government as a means of subsistence paired with other governmental programs that keep bellies filled but bodies lacking vital nutrition. In many Native communities gas stations will be the only option for shopping close to home. Grocery stores and markets are often located far away from the community, or off of the reservation, marking many Indigenous communities as being “food deserts” and “food insecure”. According to the U.S. Department of Agriculture, approximately 23.5 million people in urban and rural areas of the United States live in “food deserts” (i.e., low-income areas without access to healthy foods). Improved access to healthy foods might improve eating habits and decrease obesity.¹⁵ Native communities are much more likely than other communities to be food insecure. High levels of poverty and

Below: Fresh-picked green beans to be processed and stored for farm to school use in the winter months.



¹⁵ *Cdc grand rounds: Childhood obesity in the United States*. (2011, January 21). Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6002a2.htm>



unemployment, low education levels, and the relative isolation of many communities make Native people particularly vulnerable. Access to food can be a challenge. Many reservations have significant food deserts. Isolated settlements create logistical and cost challenges, limiting people's ability to access affordable nutritious food because they live far from a large grocery store and do not have easy access to transportation.¹⁶ Creating farm to school programs will alleviate some of the pressures of getting fresh local foods into those communities and getting more nutritious and more culturally relevant food to the children.

Keeping it Local

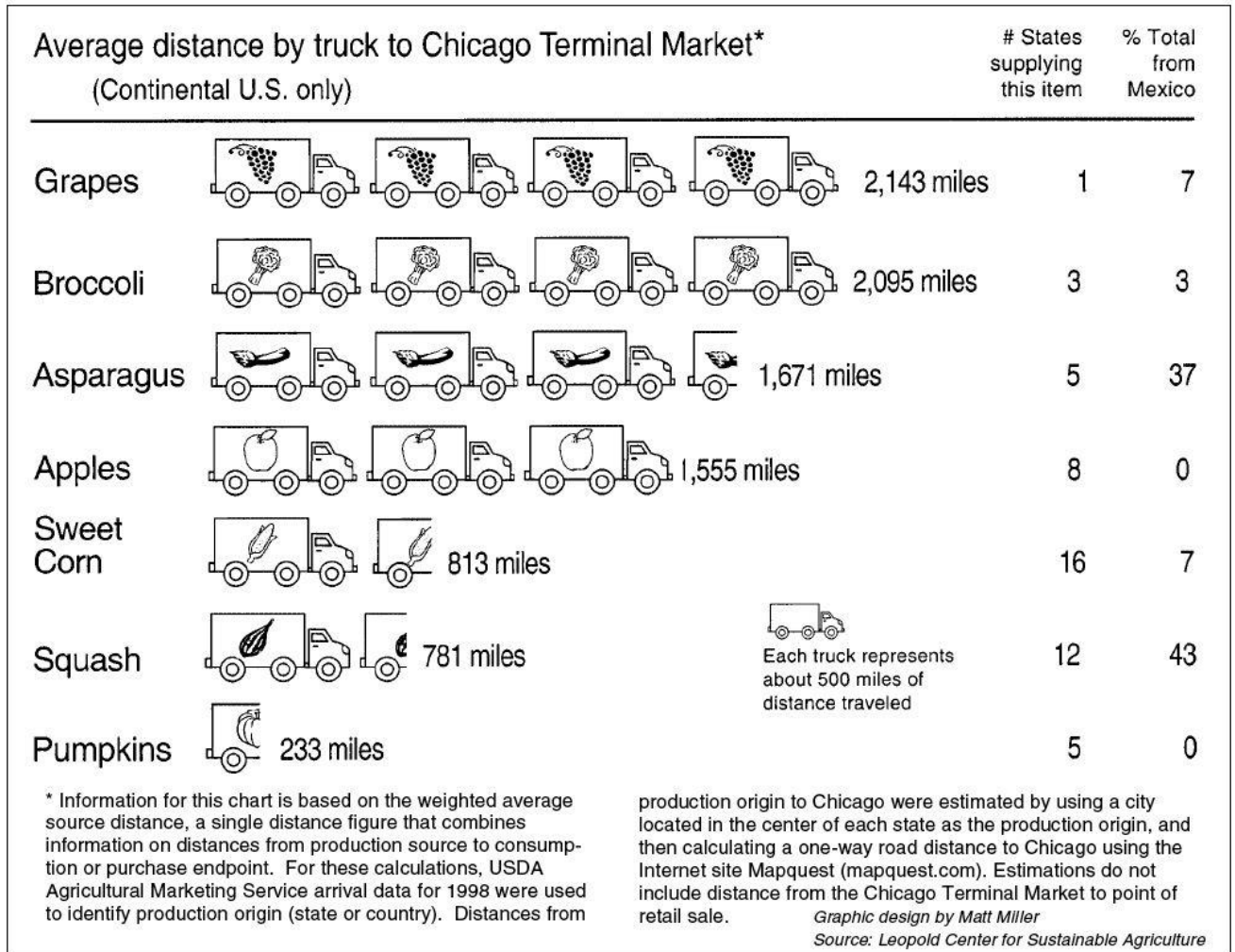
Why buy locally grown food versus food grown far away and brought into the community on a truck? Not only will the effort be a significant connection to the land for students as they eat food from the soil in their own communities, bringing students further away from a nature deficit, but it will also work to keep the money right at home in the community. Schools participating in a farm to school program will be paying community



members or at least people living locally who grow and raise food for their goods rather than filling a corporation's pocket's thousands of miles away. For an example of how far food travels to reach a community on a truck, please refer to the figure on the following page.

Above: One of the White Earth Land Recovery Project local gardens in Callaway, MN. The orange squash in the forefront are grown out from the 800 year old squash seeds.

¹⁶ *Addressing child hunger and obesity in Indian Country: Report to congress.* (2012, January). Retrieved from <http://www.fns.usda.gov/fns/tribal/documents/IndianCountrySummary.pdf>



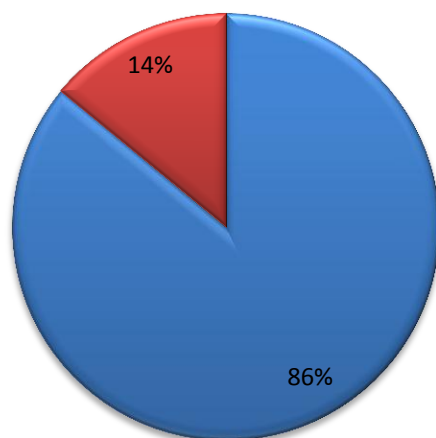
While food from a truck that's driven hundreds of miles is currently the way schools in most Indigenous communities get food, it doesn't have to be this way. The figure above shows that most food travels over 500 miles to reach lunch tables. The following figure shows the amount of money spent on food purchased on the reservation versus the amount of money spent on food purchased off of the reservation. It is important to remember that by purchasing food raised by community members or by growers living near the community, we are strengthening the economy of our Indigenous communities and keeping the money just as local as our healthy food.

¹⁷ Graphic by Matt Miller, Leopold Center for Sustainable Agriculture based on USDA data, 1998



Food Economy

■ Food Dollars Spent off the Reservation ■ Food Dollars Spent on the Reservation



Evaluating Community Need

Look at Statistics

To gain a better understanding of a community's need, look at the statistical data for that area. Numbers reflecting the percentage of people in general as well as children living with obesity and obesity related illnesses and diseases such as type 2 diabetes will indicate such a need. The White Earth Land Recovery Project used various routes of determining need at Pine Point Elementary School. It involved analysis of data on measured levels of diet, eating behaviors, and health outcomes, such as body mass index. At the student level, a questionnaire was assessed regarding the changes in student knowledge and student attitudes concerning the consumption of fruits and vegetables; changes in self-reported fruit and vegetable intake as well as lunchroom observations of changes in fruit and vegetable waste; and changes in health outcomes including body mass index. Ideally, height and weight would be measured each month; however, every three months was found to be sufficient. For children and teens, the Child and Teen Body Mass Index Calculator provided by the Centers for Disease Control and Prevention website was used.¹⁸ This BMI calculator is the most accurate as it takes into account the child's exact age, height, and weight, to the nearest fraction of pounds and inches. Perhaps

¹⁸ <http://apps.nccd.cdc.gov/dnpabmi/>



the most critical component of BMI data collection is the consistency and accuracy of the person taking measurements. It is recommended that the participants are measured in consistent ways, taking precise measurements with a digital scale.

Statistical information that shows the number of children in that community qualifying for free or reduced lunch and breakfast programs correlates to the poverty level present in that community and the probability of that community being a “food desert” and “food insecure”. A person must become familiar with the numbers associated with that community. How many students are there and what are the health and food demographics? The nutrition value of the school’s meals might also be an important factor in deciding to start a farm to school program. Are the fruits and vegetable fresh or canned with preservatives, excess amounts of high fructose corn syrup, and dyes added? If most of the food comes straight out of cans then a transition to fresh foods could mean a world of change for a school and for an entire community. It is important to do your research and get facts and figures about your target community’s food and health profile.

Assessment Tool

A helpful resource to use in addition to hard community statistics when evaluating need in your community is an assessment tool compiled by The First Nation Development Institute called the *Food Sovereignty Assessment Tool*. This assessment will help you better understand the community’s position in the area of food security and will add to your knowledge of your community’s food and health profile. First Nations Development Institute says that “Food sovereignty assessments are one strategy that can be used to help reach these goals [reclaiming local food systems, educating community members about diet-related diseases, revitalizing traditions associated with agriculture, and developing new food and agricultural enterprises], and to revitalize Native agriculture and food systems. Implementing these tools will assist in identifying barriers and opportunities in the areas of health, economic development, and cultural revitalization as they relate to food and agriculture.”¹⁹ When an assessment such as this one, which can be found on the First Nation’s Development Institute’s Website, is paired with the statistical data for your community, a more complete evaluation can be made about your community’s need.

¹⁹Bell-Sheetter, Alicia, *Food Sovereignty Assessment Tool*, Fredericksburg, VA: First Nations Development Institute, 2004.



Launching

The school food systems in Native American communities are complex and structured quite differently from schools outside of Native communities. Each community has a distinct organizational structure used to coordinate the food distribution in schools, in addition to its own distinct culture and history.

- Farm to Cafeteria Initiatives: Connections with the Tribal Food Sovereignty Movement, 2011

When Should a Program Start?

Growing seasons are also essential to keep in mind. Northern climate programs, like ours, have a short growing window. We must plan to buy food for the entire year during the summer months. For us and other similar programs in northern climates, planning for the summer growing season should start in February when growers are planning their crops. Whatever climate a farm to school program may be working in, be aware that great planning should be done to stay ahead of your growing season by a few months. Remember this when the program is launched.

Making Goals

Coming up with a plan for a new farm to school program initiative can be quite exciting but also overwhelming. Making long term and short term goals for the efforts of a farm to school initiative in the beginning will help make the work a lot more manageable throughout the launching and sustaining phases. Making sure the goals of the initiative are attainable. Whether one person is starting the program or many are working together, come up with a few broad goals that can be achieved in visible steps and can be easily measured. Some initiatives have a goal to provide 50% of the lunch tray with local farm to school selections. Figure out what the goals of the program might be. Once they are documented, revisions to them should be made as needed to ensure the program is evolving from the original thought.



Finding Growers

Once a need has been established, start planning. This is the time to gather resources and to do research beyond community need. Get as much information as possible about local food options. Relationship building is one of the most important elements of a successful farm to school program. Through building relationships and exploring the connections of neighbors and people already known in your community, it will be easier to compile a working list of people who garden or farm both small scale and larger scale. The family outside of town with a big garden in their front yard might be a mystery, but someone else in the community might already have a positive relationship with them and could send the grower's information in the right direction. Dig around, keep your eyes open, and if you feel like you are running into a dead end looking for growers, put ads up in local businesses or in your local newspaper. Putting an ad up is also a smart way to share your idea of a farm to school program with community members interested in helping for the long-haul. There is also a database for locating growers and farmers in your area.²⁰



Above: Local growers Art and Virginia Disse (a Pine Point Native) have grown apples for the Pine Point farm to school program and enjoy welcoming students to their orchard.

Regulations

You want to prepare fresh bread made from local organic flour at your home and bring it to the school for lunch the next day. You can do this because you work with the farm to school program, right? Wrong. There are many regulations and laws about food preparation that will shape the way you transport, process, and prepare foods. Fortunately, most schools you will be working with already have USDA certified kitchen facilities. This is a federal regulation, that all food served in schools must be prepared in a USDA certified facility. If you have access to another kitchen that is also USDA certified, it will provide more workable preparation space—but the facility must be federally certified. This is just one example of the regulations that exist for farm to school programs. Another example of a regulation relevant to farm to school is a prohibition placed on raw milk. Think twice before purchasing unpasteurized

²⁰ It can be found at <http://www.localharvest.org/>.



milk from a local dairy farmer—though it might be delicious, it is against federal regulations and like the rest of these federal food policies for farm to school programs, must be obeyed.

More resources exist regarding the many state and federal regulations that will help your program be both successful and code-abiding. The Minnesota Department of Health along with the University of Minnesota has published a sort of “cheat-sheet” with farm to school regulations (Please refer to a copy of this resource in appendix 2.) Other states should also have similar resources available. Another beneficial regulation resource is available on the USDA’s Farm to School resources page. The USDA has this to say about regulations and farm to school programs:

“While establishing your Farm to School efforts is an exciting process, it is important to have a thorough understanding of the requirements and policies that are involved with purchasing local food items. Understanding USDA procurement regulations and policy (as well as any State and local requirements) will help you to ensure that your local food purchases meet the requirements and, also, provide an understanding of how to procure local food items that best fit your needs at the lowest price. To assist you in making sound purchasing decisions, below is a list of important references related to USDA’s procurement regulations and policies for the Child Nutrition Programs.”²¹

Not many Indigenous communities have their own food regulations and policies. Because of this, the regulations set forth by the federal government are adopted by default in Indigenous communities. Tribal sovereignty could be exercised and tribal food policies could be created in order to change this. For now, the federal government holds the regulations for food policies in Native communities. The White Earth Land Recovery Project is currently working on presenting a food policy draft to local and governmental officials. Sovereignty can be exercised and positive changes can and should be made in our own communities.

Staffing

There needs to be one consistent person throughout the entire planning, launching, and life of a farm to school program to be the constant guide. A ‘farm to school coordinator’ position should be created. This way, the program can survive turnover and the relationships that remain as the backbone of the program will remain strong. An Internship position could be

²¹ USDA. (2012, October 01). *Farm to school policy*. Retrieved from <http://www.fns.usda.gov/cnd/f2s/f2spolicy.htm>



created with grant money for staff help with a sort of 'living stipend'. The position could be extended towards college graduates looking to grow in with a meaningful new position. Creating jobs within the community for community members is the ideal solution as the knowledge would be, in a sense, *for the community by the community*. A community member might also hold valuable local connections. But other avenues exist. Programs such as AmeriCorps VISTA might also be useful in looking for staff resources. Programs like AmeriCorps work with organizations to provide necessary staff support to help raise programs to new heights. In the case of AmeriCorps, eliminating poverty is the priority.²² This is just one example of available staff resources. Other support staff will also be necessary for the ease of food transport and food preparation for kitchen staff. In Indigenous communities especially funds are limited. These cooks will be overworked and kitchens will almost certainly be understaffed. It will be important to note that opening a can of carrots from the food truck will be far easier than preparing fresh carrots from a local grower. Support staff must be available to aid cooks in food preparation. These positions should also be paid with grant money and should be offered to community members as top priority. If a community seems particularly interested, a volunteer crew of support staff might also be created, saving the entire program money.



Above: Tessa McLean is always happy to lend a hand in the kitchen. With her help, over 200 dozen ears of sweet corn were processed for the winter. It can't be done alone!

Communicating within the School system

In order to effectively work with your target schools, great attention needs to be given to the relationships made with the school administration as well as kitchen staff, cultural teachers, or teachers in general, and finally, the students. The support of the administration could be a determining factor in the overall success of a farm to school initiative.

²² Overview- for organizations. (2012). Retrieved from http://www.americorps.gov/for_organizations/overview/index.asp



To have a vision about the change that could be brought about by a transition to a farm to school program is one thing. You or you and whoever you are working with could be all in favor of the idea but you cannot actualize the dream without first gaining support and planting the first seed. First, you must have done your research. Make sure you have presentable facts and figures about the community's need as well as clear goals for the proposed program. Get in contact with the administrators of the chosen school and ask them if you can come to a planning meeting that might include the kitchen staff or if you could make an appointment with the superintendent or principal—just so long as you speak to someone in charge. Present the facts and why a farm to school program would not only be important to the health, economy,



Above: A freezer full of out-of-season fresh-processed farm to school foods. An example of how much storage room farm to school food can demand. On its own, will the school have enough storage space?

and culture of the students—but also feasible. In these meetings with the school administration and cook staff, it is important to communicate expectations and goals. A productive conversation would include, but would not be limited to, conversations about kitchen staff support (How many additional people will be needed in the kitchen to prepare these foods? How much room will their refrigerator and freezer have for processed out-of-season farm to school

foods, will extra freezer room need to be made somewhere else? Does the kitchen have all of the equipment or tools it needs to properly transition to a farm to school program?), menu planning (Plan menus together each month, or make changes together to existing menus), possible food options (Share grower information with school staff and come up with order

numbers), scheduling expectations (What days and at what time should food be delivered and how long will staff need help preparing it?), educational activities (How can this most easily be integrated into already existing school activities), and funding (Discuss the use of federal grant money received by schools for buying fresh food. This money is likely to already be in use for off-the-truck food). Include the school staff in the goals of the initiative and work together to create a program that everyone can be passionate about.

Surveying

Gathering information about where the community sits with food knowledge will be helpful initially. Gauging where students are at in their food journey will better assist program



staff in understanding where to start with students. Ask questions about their experience with certain foods that will be introduced. List some foods traditional to the community and ask the students what they can say about them—their experiences with those foods, if any. Stay away from open ended questions that might leave students contemplating, do I like to eat carrots or chicken nuggets better? These sorts of questions are not productive and do little to serve staff understanding. If the students indicate that they know very little about the foods to be introduced, then staff will better know where to start in the education of that particular farm to school community.

Menu Planning

Words like local, fresh, healthy, and traditional should be the foundation of successful farm to school menu planning. During those initial meetings with cook staff, sit down and look at the already existing menu. With nutrition and health regulations in mind, work together with staff to make additions to substitutions. Keep in mind the goals of the program and also what sorts of food items have already been sourced. Schools sometimes do their menu planning month by month while others make menus for the entire academic year all at once. In meetings with cook staff and overseeing food staff, timelines should be discussed. Will the menu be changed each month (if so, when will it happen each month) or will there be a meeting to make changes to all the menus at once. Such foresight for year-long menu planning could be a challenge as food sometimes cannot be confidently sourced 10 months in advance. The process of menu planning with a school insures that unhealthy foods will be substituted with better farm to school options. Planning for a menu will also help better coordinate the purchasing of food from growers.

While some menu substitutions were simply fresh, local versions of previously industrially-canned foods, an emphasis was placed on reintroducing traditional Anishinaabe foods. Students have had the chance to sample some traditional favorites. Examples include: buffalo, hominy, turkey, venison, berries, sweet Corn, squash, beans, maple syrup and wild Rice.



Above and below: These trays illustrate the food diversity that can come with menu substitutions. These farm to school options replace canned things like canned vegetables and hot dogs.





In alignment with our own goals, foods on the school menu with high fructose corn syrup and food dyes were replaced with local (and sometimes organic), traditional and healthy fresh options wherever possible. Breakfast substitutions included pancakes made with wild rice flour and natural locally harvested maple syrup (the flour from wild rice and maple syrup are both foods traditional to Anishinaabe people). Farm fresh eggs substituted for powdered eggs and natural local beef or bison sausage links replaced commercially processed “meat” sausage links. Students, ages 3-14, loved fresh versions of old favorites like Corn on the Cob and Green Beans and new favorites like Buffalo Burgers²³, Chicken Lo Mein, and Wild Rice Cake. (See Appendix 3 for a lunch menu example) White bread was replaced by homemade whole grain breads and baked goods made fresh in our own USDA grade kitchen facility. Fresh bread baking could also be done in a school kitchen. Great attention would need to be given to cook staff needs and space used as to not get in the way of regular kitchen activities.

“The new bread made with local organic flour was wildly popular, staff and school guests clamored to buy any extra loaves at the end of the meal. One teacher loved the new homemade bread so much that she sheepishly confessed to scavenging unfinished pieces off students’ plates before they dumped their lunch trays!”

- Kyra Busch, 2008 farm to school coordinator

Pricing

“When it became clear that the school district needed to look beyond the single source farm, Shelly went with a “share the wealth” strategy of sourcing produce from as many local farmers as possible, but she also established a bidding system to keep the process fair and competitive. She determined how much of each item the schools need and what the district historically paid for that item at different points in the season (these prices were based on contracts with big distributors). She publishes a list of price points and lets farmers (and supply houses) submit bids on the items they can provide. Shelly selects the lowest bidder for each product, which has led to sourcing from many different producers.”

-Topic: How Do I Contract with Local Farmers at a Competitive Price for Both Them and Me? www.coloradofarmtoschool.org

²³ With grant funds, the White Earth Land Recovery Project was able to purchase a Hobart meat patty press to better assist in the transition to healthier meat options that often came unprocessed. The extra work of processing the meat by hand took such a great amount of time that funds were allocated to the responsible investment of kitchen equipment.



The example from a central Colorado school district is one method used by farm to school programs. This is a great strategy, This very precise strategy, being that it is so precise, also demands precision and consistency year to year, as growers will be expecting to have a home for that 200 dozen ears of sweet corn they are planting.

Our program buys directly from the grower, and if the food is in season and no storage processing is necessary, then we pass the price on to the school and the school pays the grower. If the food purchased is to be processed and stored for off-season consumption, then the organization buys the food, processes it, and then divides the amount spent on the entire lot divided by each portion of the processed food. Growers still count on our business each year and generously grow to our needs.

Educational activities

Herein lies a rather unique opportunity for Indigenous farm to school programs to pair food with education. As



mentioned earlier in the section on re-traditionalizing foods, education in the form of creating a school or community garden where students are charged with the care and harvesting of foods, educating the community about nutrition and agriculture through hands-on activities and presentations, revamping school curriculum to include units about traditional food relevant to that season, or

the revitalization of local food traditions on the reservations such as repopulation of bison herds or growing hominy corn.²⁴ The curriculum that The White Earth Land Recovery Project developed is one that highlights seasonal traditional foods once a month during an already established school activity day called “family fun day”. This has also been adapted and changed as needed—just another lesson about flexibility and problem solving within a community’s farm to school program. Adapting to changes as needed



Above: Students at Pine Point enjoy learning the story of corn husk dolls and how to make them using our Pink Lady heritage corn. Many had never seen corn other than sweet corn before—and it was pink!

Left: Other students at Pine Point learned how to make corn braids. They learned that braiding the heritage corn helps dry it out so that it can be made into hominy.

²⁴ Dwyer, E. (2010, April). Retrieved from http://www.farmtoschool.org/files/publications_447.pdf



is another reason why those relationships are so crucial. Administration, teachers, and kitchen staff will all be necessary players in making any sort of educational activates thrive in a community.

Funding

In Indigenous communities, there are varying types of schools. First there are public schools without tribal affiliation, then there are those public school systems with charter schools within, private institutions that are often affiliated with a religious group, schools funded by the tribe, and then schools run by the Bureau of Indian Affairs (BIA) and supplemented by grants. The type of school will determine what types of grants the school receives for food programs. Some schools will already have money to use for buying fruits and vegetables—money spent outside the community on food that will be shipped in on a truck. Federal funds like this can be used instead to pay for farm to school foods. Individual school administration will have more information about what type of funding is received to pay for certain types of foods.

There is also outside funding available. This funding, unlike school-based grants, will be important when paying the wages of staff members, the general project equipment costs (Ex: the purchase of the Hobart burger patty press), and transportation needs whether a vehicle is purchased specifically for the project or staff members use their own vehicles and get reimbursed for mileage. Funding is available through different USDA based grants, as well as different grants focused in supporting farm to school initiatives. These can be found on the farm to school Network's website.²⁵ These resources are divided based on federal and state specific grants. Additionally, grants are available with various organizations interested in supporting and encouraging initiatives to better Indigenous communities. While comprehensive information about available grants interested in funding Indigenous farm to school programs are not yet created, internet searches will produce a plethora of information.

Sustaining: Growing what has been started

Once the pieces have come together and the farm to school program is up and running, working towards its set goals and filling students' bodies full of nutrition, their hearts and minds with knowledge about traditional foods, and strengthening the local food economy, all that is left to do is to sustain these things. If continued care is given to growing the program and

²⁵ National Farm to School Network. (n.d.). *Funding opportunities* . Retrieved from <http://www.farmtoschool.org/fundingopps.php>



adapting to possible changes, that will determine its security, and subsequently its success, over the years.

Relationships

Remember to continue nurturing these relationships with school administration, cook staff, teachers, students, the greater community and growers. Keeping lines of communication open will offer the program to grow in healthy ways. Asking cook staff their thoughts on the program's success and asking general surface question to collect a feeling about how the cook staff is being supported. Continue working with school administration and teachers regarding educational activities and any outside the kitchen opportunities. Make the farm to school staff as visible to the students as possible. If the farm to school staff becomes another fixture in the school, then eating healthy and traditional foods will also then become more familiar—and will hopefully gain student appreciation.

Do not forget that the greater community can also have a part in the action. Continue posting flyers that might involve them or hold informational meetings at the school. Greater community members could become volunteers, potential staff, or growers themselves if shown the opportunity. And judging from interest, community activities revolving around food could also be offered. The White Earth Land Recovery Project, for example, held cooking classes for the Pine Point Community's residents for as long as people were interested. Word (and success) about farm to school spreads this way. Also keep the growers in mind. Report school information back to growers and tell them just how many children their food was able to feed, anecdotes about how much the students love a particular food from that grower, and of course, how their continued support is doing positive things for the community.

Through relationships with the school administration and the growers, coordinating site visits or school visits can also be a great way to make the connection real between the farm and the school. Bring the students on a fieldtrip to a grower's farm or food operation. Or invite the

farmers to a "Grower Appreciation Day" meet and greet at the school. Students will love to see who grows their food and growers will finally be able to put faces to those treasured anecdotal



Above: Students learn the ways of harvesting the same maple syrup they eat with their school breakfast, thanks to the farm to school program and an informative site-visit to Pine Point's local maple syrup provider, Ron Chilton's, sugar bush.



stories. The students will ask questions of the growers and a new conversation is able to start where children can get excited about farming and thinking nature is a cool thing again.

Right: Producer Lori Gellings, a graduate of Pine Point School and heritage turkey grower commented on how nice it was to return to her old school and see such innovative and fun programming. The visit to Lori and husband Jim Gellings' turkey farm changed more than a few minds. Pat Miller, the school librarian and bus driver, was scared to visit the farm having only seen industrial turkey processing plants scattered throughout Northern Minnesota. After the visit she said not only would she go back, but she would also start eating turkey again! Seeing a group of children sprinting toward them scared several turkeys so badly they ran into the woods for safety. Sixth grader Alan Jackson recounted chasing the turkeys back into their coop for the evening was the most fun part of the visit, except for maybe the hot chocolate and venison sloppy joes.



Staff Assessment

How are the people on the farm to school team doing? Assessing how many people are working on the program and the quality of their work can help determine if staff changes are needed. An example may be *staff working to support school cooks are becoming overworked and additional persons are needed. How would you assess this need of taking on another person as a volunteer or paid person if funding allows?* Learning this information can be accomplished through conversations with the program staff and volunteers as well as school cook staff. Or maybe it comes to the program's attention that *there are somehow too many people helping in the kitchen* and a volunteer rotation or a better organized support staff schedule is necessary. *Does the coordinator feel supported?* Often, adaptations need to be made to peoples' duties. For example, the coordinator should have a recognizable presence in the school and in the kitchen. But the coordinator probably will not have time to help with all the day to day meal preparation between deliveries, site visits, and overall planning.



Continued Funding

Grants will not seek out a farm to school program, the program has to seek out the grants. Development files should be kept for the program as a way to organize grant opportunities to grow the program grant opportunity by grant opportunity from its first years. Continued search for federal, state specific, and nonprofit funding for the program will likely become more focused easier to match as time goes on and Indigenous farm to school initiatives grow in popularity.

Evaluation

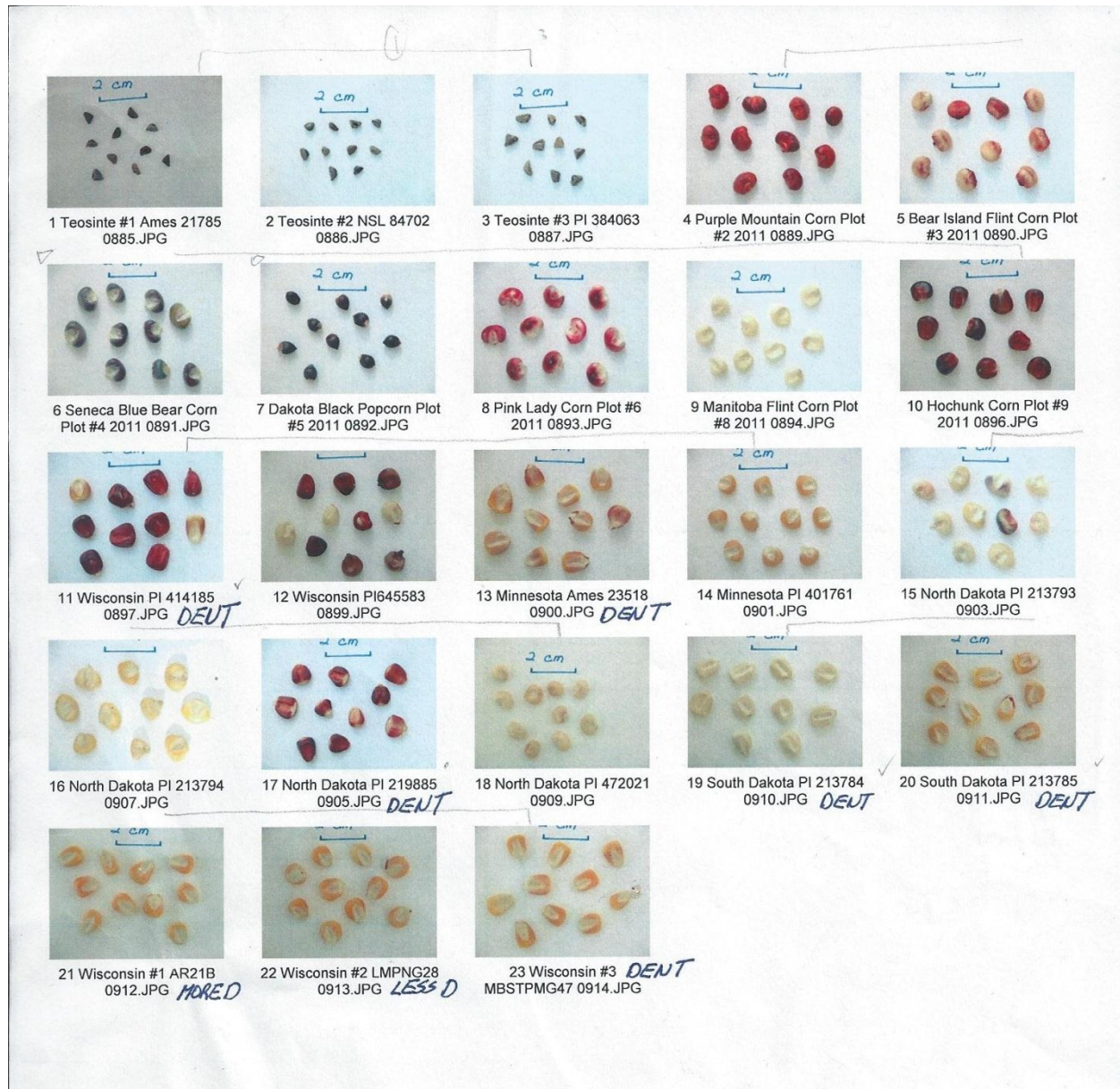
Examining a program's achievements through word of mouth alone is nice, but will not give complete information that can be used to measure growth or success of a program. The first step to measuring the success of a program is to look at statistical data from one year to the next in the community the program serves. Have there been significant changes? A program should also use surveys again to measure student knowledge as well as the knowledge of any community volunteer staff or community members if side programs for the greater community were offered. Asking survey questions that extend from the initial survey will show a pattern of positive growth in the community and will give you an idea about how students are learning the information best. Ask questions specific to the program and really use the opportunity of a survey to find out information that will help the program best evolve. Assessments are available for farm to school programs (listed below are a few resources), but asking program specific questions in the form of surveys will allow Indigenous farm to school programs to measure program specific cultural components to the food education.

More Resources for Assessing a Farm to School Program

- NFSN-UNC Evaluation Toolkit – <http://www.farmtoschool.org/webinars.php>
- NFSN Sample Tools List – <http://www.farmtoschool.org/webinars.php>
- Bearing Fruit: Farm to School Program Evaluation Resources and Recommendations
<http://departments.oxy.edu/uepi/cfi/bearingfruit.htm>
- Center for Advanced Studies in Nutrition and Social Marketing
<http://socialmarketing-nutrition.ucdavis.edu/tools/somarktools.php>
- California Department of Public Health
<http://www.cdph.ca.gov/programs/cpns/Documents/Network-Compendium.pdf>
- Cornell Garden-Based Learning Evaluation Toolkit
<http://blogs.cornell.edu/garden/grow-your-program/evaluation-toolkit/>
- California School Garden Network <http://www.csgn.org/>
- Learning Gardens Laboratory Evaluation Research Team. (2007). Learning Gardens Laboratory Assessment Package for Schools. Lane Middle School, Psychology Department and Graduate School of Education, Portland State University, Portland, OR. Contact Ellen Skinnere skinnere@pdx.edu



Appendix 1: Example Indigenous Heritage Corn Varieties





Appendix 2: Regulation Resource Sheet

Serving Locally Grown Produce in Food Facilities

Minnesota Department of Agriculture; Minnesota Department of Health; University of Minnesota Extension

Introduction

Can food facilities like restaurants, grocery stores, and school lunch programs legally buy or accept donated produce from a farmers' market or directly from a grower and serve it to their clients, students, or customers?

The answer is "Yes." In fact, this trend has been on the rise since 2003. This fact sheet provides answers to some frequently asked questions about how food facilities can use locally grown produce safely and legally.

Definitions

Food facilities: restaurants, caterers, school food service, institutions, day cares, community centers, churches, hospitals, health care facilities, food shelves/banks, grocery stores, food markets, cooperatives, bakeries, convenience stores, temporary food stands, warehouses and wholesale food processors and manufacturers.

Growers: farmers, school gardens, community gardens, or gardens at food facilities.

Sell/Sale: includes keeping, offering, or exposing for sale, use, transporting, transferring, negotiating, soliciting, or exchange of food (MN Statutes, Chapter 28A.03 Subd. 6).

Can food facilities buy or accept donated produce directly from growers?

Yes, produce growers are an "approved source" if the food is grown on a farm or garden that is occupied or cultivated by the grower, and has not been prepared or stored in a private home.

Growers are responsible to ensure that all produce (food) that they sell or donate complies with applicable regulations. Responsibility includes proper handling and that the food is safe, wholesome, and unadulterated. For assistance on obtaining information about Good Agricultural Practices (GAP), water potability, organic and related items, please contact the Minnesota Department of Agriculture (MDA) at 651-201-6027.

Is a grower required to have a food handler license to sell or donate their produce?

It depends on the situation:

- ♦ People who sell or donate produce from a farm or garden that they rent or own are exempt from licensing.

This includes growers selling their own whole produce or produce with "limited processing" (as described below). (Minnesota Statutes 28A.15 and MN Constitution Article 13, Section 7.)

- ♦ People who sell or donate produce that is "processed" (as described below) are normally required to be licensed.
- ♦ People who wish to sell produce that they have not grown themselves must be licensed to sell to any customer.
- ♦ In other circumstances, a Wholesale Produce Dealer license may also be required (e.g., if a person buys produce from a farmer for resale).

All producers, processors, handlers, and vendors of food, whether or not they are required to be licensed, must comply with other food safety rules and requirements.

Contact the Minnesota Department of Agriculture at 651-201-6062 for additional information on licensing, and specific product or processing requirements.

What is considered "processing" of produce?

MDA refers both to "processing" and "limited processing" of produce:

Processing includes slicing, heating, canning, freezing, drying, mixing, coating, bottling, enrichment, or similar actions. Any addition of off-farm ingredients (e.g., salt) prior to use or sale is also considered processing.

Limited processing includes sorting or trimming (e.g., topping carrots or husking corn) as part of the harvesting process, or washing (e.g., to start the cooling process or to remove extraneous soil and debris).



Growers that choose to process their food by canning, bottling etc., must use an inspected and approved kitchen or processing facility, and follow all other applicable regulations.

What are the requirements for an inspected and approved retail kitchen or processing facility?

There are a number of requirements that must be met whether you are beginning a new business or expanding an existing business. Contact MDA (651-201-6027) before you begin processing. MDA will provide details about licensing, kitchen standards, or approval to use a facility for a new purpose. Also note the following:

- An approved kitchen or processing facility must have a certificate of occupancy with documented approval from local building, plumbing, fire, electrical, and zoning inspectors as required by state and local laws.
- Equipment must meet National Sanitation Foundation International standards, or its commercial equivalent. The facility must have adequate storage space for ingredients, equipment, packaging materials, and finished goods.
- Plan review is required at least 30 days prior to starting business. Find plan review information and other requirements for food facilities at: <http://www.mda.state.mn.us/en/food/business/plan-review.aspx>

What are the roles of persons-in-charge and community volunteers involved in produce processing at a licensed facility?

The person-in-charge (PIC), generally a Minnesota Certified Food Manager, must be well-informed about the food safety concerns and requirements relating to the food facility's operation. PIC duties include directing food preparation activities and correcting conditions that may lead to health risks for the consumer.

Under PIC supervision, community volunteers may help to process produce in an inspected and approved kitchen facility. For example, parents can help to process food from a school garden.

What are some other purchasing and receiving guidelines for local produce?

- Check with the state or local regulatory authority that licenses and inspects your facility before changing your menu or expanding your business by using new foods or methods. They can help you determine whether there are training, licensing or permit requirements that you must follow before expanding your business or menu.
- Visit the farm or ask questions about the food production, handling, and storage.
- Inspect the transportation vehicle. Inspect for evidence of chemicals, odors, and obvious debris.
- Inspect the produce for signs of insects, disease, bruising, damage, over-ripeness, and immaturity.
- Ask for documentation that references the USDA Certifying Agent if the produce is advertised as "Organic."
- Properly wash produce to remove soil and surface contamination before use.
- Ask for a receipt of purchase and keep good records. Good recordkeeping is particularly important if illness or injury prompts the need to trace product back to the supplier.

What kind of receipt should food facilities get from the grower?

Food facilities should use a receipt that includes the following purchase/donation information:

Date: _____ Received by: _____

Donated: _____ Purchased: _____ Purchase price: _____

Description and amount of produce: _____

Date harvested: _____

Harvest location: _____

Name of grower: _____

Address: _____

Phone: _____ Email: _____

<http://www.mda.state.mn.us/food>

(651) 201-6027 • 1-800-967-AGRI

www.health.state.mn/divs/eh/food/fs/index.html

(651) 201-5000 • 1-800-657-3908



UNIVERSITY OF MINNESOTA



MINNESOTA DEPARTMENT
OF AGRICULTURE





Appendix 3: Example Lunch Menu

Pine Point School Lunch Menu- January 2008

Mon.	Tue.	Wed.	Thurs.	Fri.
		1/2 Chicken nuggets Oven fries Green beans Pears bread	1/3 Pizza Lettuce salad Apple sauce	1/4 Chili/crackers Grilled cheese sandwiches peaches
1/8 Spaghetti Corn Bread pineapple	1/9 Tomato soup Ham/cheese sandwich Coleslaw apple	1/10 Chicken patty on bun Fries Tomato slices orange	1/11 Corn dog Fries Veggie sticks Fresh fruit Chocolate chip cookie	1/12 French bread pizza Lettuce salad Mixed fruits
1/14 Chicken strips Potato wedges Carrots/celery pears	1/15 Chili/crackers Corn muffin Pineapple Grape juice	1/16 Turkey burger Mac n' cheese Green beans Mandarin oranges	1/17 Italian dunkers Carrots Peaches	1/18 Sloppy joe on bun Coleslaw Pickle Orange
1/21 NO SCHOOL	1/22 Taco salad Meat, cheese, lettuce, tomato, sauce, chips	1/23 French bread pizza Tomato, lettuce salad Applesauce	1/24 Spaghetti Green beans Garlic bread peaches	1/25 Scallop potatoes/ham Carrots Pudding Bread
1/28 Sub sandwich Potato salad Mixed fruit Sun chips	1/29 Chicken strips Green beans Oven fries Apple slices	1/30 Macaroni hamburger hotdish Corn on cob Bread	1/31 Turkey roast Mashed potatoes Peas Apple sauce	

*highlighted items provided by the farm to school program