Public Health Association of BC

A Fresh Crunch in School Lunch:

The BC Farm To School Guide

2nd Edition

DIG IN!

A Fresh Crunch in School Lunch: The BC Farm To School Guide – 2nd Edition

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www.phabc.org/farmtoschool

Executive Summary

Today, more than 20,000 British Columbia school children are experiencing a new farm fresh crunch in their lunch as Farm To School (F2S) programs sprout up across the province. Parents, educators, farmers, health professionals and others are actively searching for information and tools to start their F2S program – a program that nourishes the body and minds of children, and contributes to the health of farms, community, and the environment.

The Public Health Association of BC (PHABC) and our many partners want to see more children, more schools, more farms, and more communities enjoy the benefits of this program. This guide was developed to support communities in their F2S endeavours. It provides practical information, tips, and tools for developing a local program that complies with provincial and federal health regulations and is sensitive to the diversity of schools throughout BC. In the following pages you will find information on how to set-up, maintain, promote, evaluate and celebrate a F2S program in your community. While components of this guide will be of interest to anyone seeking to build a F2S program, it will be of particular interest to the school and farming community.

Additional practical tools and reference material **may be found on the accompanying CD " Tools From the Shed".**

> More than 20,000 children have an opportunity to feast twice per week from a garden of local greens right at school.
>
> ”

Students at Dragon Lake Elementary School, Quesnel, BC

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chapter 1

THE FARM TO SCHOOL MOVEMENT

History and Background of Farm To School in British Columbia

Farm To School is not a new idea — It is a "tried and true" program that has been operating in communities across the continent. Initially developed in Santa Monica, California in 1996, today there are over 9,800 schools involved in Farm To School programs in 50 states. In Canada, a national Farm to Cafeteria movement is underway spearheading the development of Farm to School, Farm to Hospital and Farm to University programs from coast to coast to coast.

British Columbia has the distinction of having the most extensive F2S network in the country. From an initial pilot project at Dragon Lake Elementary School in Quesnel, BC, in 2006 , comprehensive F2S programs have spread to over 50 schools across the province. Today, more than 20,000 students have access to a variety of healthy and local foods in their school lunch programs - much arriving from nearby farms. Further, more than a thousand schools in the province are able to offer students a snack of fresh fruits and vegetables.

Along the way, a number of valuable models have emerged, lessons have been learned, and needs have been identified. Chief among those needs was a need to update the Farm to School Guide. Communities seek up to date timely practical tools - tools useful in many contexts including in particular rural and remote contexts. This new guide, along with the accompanying CD " Tools From the Shed", offers the latest insights about F2S programs in BC, the way they are defined, successful program models, and the latest tips and tools to build your F2S program.

Why Farm To School?

We know our food system could better serve the needs of our community

- One in 5 children in BC lives below the poverty line
- One in four children is overweight
- Type 2 Diabetes is being diagnosed in children as young as 9 and 10
- Small farms, below 5 acres, make an average of $-750/acre per year
- The average age of farmers in BC is 54

Local farms, local food processing facilities, and local foods are disappearing. Most food travels thousands of miles to reach our plate and food transport is a significant factor in the depletion of fossil fuels and global warming. By choosing local, we can at least cut back on the transportation-related carbon and work towards a food system that supports local farmers and food processors.

Definitions

Farm To School (F2S)

For the purpose of this guide, Farm To School (F2S) is broadly defined as a school-based program that connects schools (K-12) and local farms. The goal of the program is to ensure children have access to fresh, local, nutritious, safe and culturally appropriate foods while at school. Farm to School programs aim to improve student nutrition, and to provide students with educational opportunities about foods and the local food system, while supporting local farmers and the local food economy.

Local

In this resource local foods are defined as foods grown, harvested, and processed as close to the school as possible. Local farms are those farms located as near to the school as possible.

Benefits of Farm to School

Research on US Farm To School programs reveals multiple impacts [1, 2]

For Children

- The choice of healthier options in the cafeteria through Farm To School meals results in consumption of more fruits and vegetables.
- Better knowledge and awareness about gardening, agriculture, healthy eating, local foods and seasonality.
- Demonstrated willingness to try out new foods and healthier food options.
- Reduced consumption of unhealthy foods and sodas; reduced television watching time; positive lifestyle modifications such as a daily exercise routine.
- Positive gains in phonological awareness of the alphabet, increased social skills, self-esteem.

For Farmers

- Diversification of market
- Positive relationships with the school district, students, parents, and community
- Opportunities to explore processing and preservation methods for institutional markets such as schools, hospitals, and seniors homes
- Establishment of grower collaboratives or cooperatives to supply institutional markets

And there are great many other benefits! Food security, development of a new economic sector to replace "evaporated" resource extraction, local markets for farmers allowing them also to avoid commodity manufacturing, the availability of real food rather than pre-packaged, manufactured "food-like substances" (to quote Michael Pollan), to name just a few."

Bill MacKay, Farmer, Riverworks Farm

Our students seem to be better behaved, more stable, and seem to be able to concentrate and learn more during the afternoon sessions than before.

Rick Miller, Principal, Mountview Elementary School, Williams Lake, BC

The Farm to School Program is an opportunity to reconnect the young generations to the farms that their food is coming from and pique new interest in farming.

Erica Nitchie, First Nations Agrologist, Ministry of Agriculture, Williams Lake, BC

[1] Anupama Joshi and Moira Beery (June 2007). *A Growing Movement: A Decade of Farm To School in California.*
[2] National Farm To School Network, Community Food Security Coalition, School Food FOCUS (March 2009), *Nourishing The Nation One Tray at a Time.*

chapter 2
ONE NAME, MANY MODELS

Farm to School Goals and Objectives

All Farm to School programs share one common goal: To Increase access to healthy, local and sustainably grown foods on school premises.

And all programs aspire to a common set of objectives:

- ❖ To close the distance between farm and fork.
- ❖ To increase the amount of healthy, local, and sustainably grown foods purchased by schools.
- ❖ To increase the consumption of healthy, local, and sustainably produced foods at school.
- ❖ To improve student knowledge about healthy eating, local foods, the local food system.
- ❖ To enhance student food skills - from grow to throw.
- ❖ To promote a healthy environment.
- ❖ To adopt a supportive school food policy.

Farm to School Food Models

While Farm to School programs share a common goal and common set of objectives, the way the programs are operationalized can be as varied as seeds in a garden. Many different models exist - each arguably a promising practice. Typically, models vary in the way food is distributed from farm to fork and the way the food is served at the school. Here are a few examples:

❖ Schoolyard Farm

- If closing the distance between farm and fork is a primary objective, building a farm right on the school grounds may be the optimal farm to school program. It reduces the distance food travels from farm to plate (reducing C02 emissions), ensures children have the freshest, tastiest foods possible, and acts as a living classroom inspiring future generations of farmers.

❖ Farm to Caterer to School

- If your school does not have the space for a kitchen, consider the Farm to caterer to School model. In this model foods are delivered to a central kitchen where they are diced and sliced and delivered to one or more schools.

❖ Forest to School and Fish to School

- In these models "local food" literally means seafood, game and "wild" foods, schools are connected with fishermen, elders and experts who can harvest and prepare traditional foods safely.

❖ Farm to School Salad Bar

- Probably the most popular food service model - fresh local foods are delivered to the school and prepared on-site and served in a portable salad bar unit.

❖ Farm to School Hot Lunch Program

- Schools that have more extensive and inspected cooking facilities can safely prepare hot meals, integrating as much local and sustainably produced food as possible. Meals can include soups, pastas, frittatas, and more.

❖ Farm to School Snack Program

- Sometimes even the simplest programs can have a big impact. Apples, pears, snap peas, and cherry tomatoes can be distributed with little processing. They can be brought in independently or the school can connect to the BC Fruit and Vegetable Nutritional
- Program. Often, this can lead into a more comprehensive program like Farm to School Salad Bar or Farm to School Hot Lunch program

Why the Focus on Local Foods?

❖ Buying Local Food is Good for the Environment

- Purchasing local food supports small and mid-size farmers who in turn provide many benefits to their communities, including farming in ways that protect biodiversity and natural habitats, local air and water quality, and preserve scenic landscapes and open space.
- Buying local reduces the amount of fuel used to transport food and subsequently the greenhouse gases released into the air. This is an important consideration, since most of the food we buy is sourced internationally, and uses approximately 4 to 17 times more fuel than food from close by.
- The transport of food requires significant processing and packaging so that it arrives fresh and looks appealing. Food packaging comprises more than 30% of the waste in landfills.

❖ Buying Local Food Supports Family Farmers and Communities

- Buying local helps farmers to be economically viable.
- Ninety cents of every dollar spent on local food stays in our community.

❖ Fresh Local Food is Tasty and Nutritious

- Food consumed closer to the time it is harvested usually retains more nutrients than food that is transported for days before it reaches the consumer.
- Because it is harvested at the peak of flavour and freshness, local food looks and tastes much better than foods transported from afar.

❖ Purchasing Local Food Enhances Our Food Security

- Purchasing local food supports the smaller farmers who preserve biodiversity within both plants and animals, providing the opportunity for flexible responses to changing weather and other conditions.
- If the international food system were disrupted, BC grocery stores would run out of foods in 2-3 days.

Sassafras Savouries dishes up local, Prince George, BC

"Farm To School is mostly learning by doing. It probably takes 4-5 months to get the program on track with good people around."

Rick Miller, Principal Mountview Elementary, Williams Lake, BC.

Small is Beautiful

F2S programs can be very different from school to school. In the early stages of starting your program, there are a few key things to keep in mind: Start small, take your time, and start with what you have.

Start small and build your program gradually: Farm To School requires new equipment, coordination, and above all building relationships with farmers and the community. This takes time, so plan a phased approach to bring the program into your school.

Start with whatever local foods are available: You may not be able to source all of the items you desire locally, especially in the early stages of your program, and over the winter months. Don't worry — keep going!

1. Start with a cook top in one class or try out the BC Fruit and Vegetable Program.
2. Start within the community. When local produce can't be found, work with a local food distributor to buy "BC". When that can't be sourced, buy "Canadian" and then beyond, if needed.
3. Supplement whatever food is brought in with produce from the school garden or greenhouse. If you don't have a garden or greenhouse, maybe this is the chance to build one.
4. Ask local home/community gardeners if they can supply you with some of their excess fruit or vegetables.
5. Preserve (can, dehydrate, ferment, pickle) local produce when it's in season and build recipes around this preserved food.
6. Place produce in a root cellar so that it is available through the winter time.

> And here in the Cowichan Valley we nurtured our first Farm to School program at Quamichan School. Of our total food budget for the program, approximately 85% was spent on food grown and raised in the Cowichan Valley and 15% on food grown and raised in British Columbia.
>
> *Cowichan Green Communities*

Remember to continue to source locally wherever you can. By working closely with your farmer and teaching children and youth about what eating locally means, your menu and items in the salad bar will become more local over time.

> Most of the produce (from the school garden) went to the school's kitchen as one of our first steps towards our two-year goal of increasing our School Lunch Program's use of locally grown produce to 15%. I wish I could describe the delight and joy on the faces of all the students
>
> *Jennifer Pardee, Bowen Island Community School*

chapter 3
BUILDING YOUR TEAM

Your Core Team

Often, a single person starts the F2S process but in order to keep the program running in the long-term, a support team is ideal. A core group of 3-10 individuals, established early on, can help create the program vision, goals, and objectives and team roles. Core team members manage, administer, and coordinate the program. They may lead communication, community outreach, education, fundraising or evaluation activities. As the program unfolds, additional partners are engaged to form an ever–widening web of support.

While the composition of a core team and the process of pulling it together can be varied there are a few key individuals that seem to work for most Farm to School teams:

- A key school champion. A principal or a teacher. The school champion must be someone who has the authority to make the changes to school programming, environment, and/or policy to support the program.
- Potential coordinator(s) to oversee the day-to-day aspects of the program. Consider people who have the passion, the skills and the time to devote to the program.
- Farmer(s) to provide the food for the program and/or on-farm/ in-class educational opportunities.
- Volunteers to help run the program on a daily basis. These could be middle or high school students. They are great champions as well as volunteers.
- Partners from the community who have a vested interest in Farm to School (consider your community nutritionist, a chef from a local restaurant, the coordinator of a local community garden, food co-op, or food box program etc.).

As soon as you have a list established, contact everyone and call a meeting!

What to do when there is no farm? Grow your local farming capacity!

Many schools have started their own gardens and invested in greenhouses so that food is grown right on site. Still others have enlisted the help of backyard gardeners who, collectively, can supply enough fresh produce to the school. If there aren't any "official" farmers in your area, here's a great opportunity to help create some!

Community Greenhouse, Tahsis BC

Contacting Your Environmental Health Officer

Creating a safe, efficient, and effective food environment is one of the first items a school must attend to. Even before you call a meeting of volunteers, parents, or local farmers, one of the first phone calls you should make is to your environmental health officer (EHO). Food service operations in public schools must be approved by an EHO, or a public health inspector (PHI), employed with the regional health authority. First Nations schools should contact their federal health inspectors.

These individuals will visit your school, assess the equipment & space, and provide you with a list of needs and upgrades (if any) to ensure your program runs safely and smoothly. Your local EHO is an excellent resource. Bring them onside early.

Fielding Questions

When you are introducing anything new, whether it is to your students, families, farmers, or your community, there are bound to be many questions. Change can be greeted with enthusiasm, indifference or resistance, so it is best to be prepared! People will want to know:

- What is the F2S program?
- Why are we changing the way we currently feed students?
- What is the benefit of the program?
- Why the focus on local?
- How will the program work in our school?
- How are farms involved?
- What foods will be served?
- How much will the program cost?
- Who will pay for this new program?

The answers to all of these questions may be found right here in this guide! A mini power point is **also available on the accompanying CD " Tools From the Shed".**

Keeping costs down

The price of fresh produce in remote communities can be very high, especially through the winter months. This is where it is critical to support local capacity by encouraging school gardens, backyard gardens and community gardens to help supplement produce coming into the school. Not only does this help build skills in the community, but it also helps to keep costs down.

Identify Your Assets & Needs

At your first meeting, discuss the many models of F2S to see which one might be right for you. Bring the EHO's report to this meeting so that everyone can see what upgrades your school might need.

You could also bring in a speaker from a neighbouring community that has a F2S program.

Next, identify what resources you already have. A mapping exercise is a great way to break the ice and help everyone contribute. Some questions you might want to ask are:

- What local food is currently being consumed at school?
- Are there other programs like Ag in the Classroom or the BC School Fruit and Vegetable Nutritional Program already?
- Who can run this program? Do they have FoodSafe certification?
- What local farms can provide produce from between September and June?
- Are there other gardens, orchards, community gardens in the area?
- What kind of funding is in the community?

By mapping what you already have (and you may be surprised to find what is already available), you can focus your energy on the gaps.

Queensway Garden, Prince George, BC

Getting Help

There are a number of individuals that may not be on the core team, but may still play important roles in the initial development, ongoing operation, and annual evaluation/planning of the program. Consider inviting the following people to your Farm to School Salad Bar Event:

Groups and Individuals to Help You Succeed	How They Can Help
Local Health Authority	❖ Help you to create a safe food environment. ❖ Conduct inspections to ensure the health and sanitation of food preparation and service areas.
Parent Advisory Committee (PAC)	❖ Assist in coordinating F2S with existing school meal programs.
Community Elders	❖ Provide insight and knowledge around traditional First Nations food systems.
Community Nutritionists	❖ Provide information and guidance on nutrition, healthy eating, and youth development. ❖ Help coordinate and review menus and recipes, including a focus on local food. ❖ Great source for educational resources, tools, and support.
School Boards	❖ Help to find funding to support the program, especially to ensure all students can participate.
School Purchasing Manager	❖ For both food and equipment purchases.
School District Maintenance Workers	❖ Can provide excellent support during initial development especially for equipment installations.
Equipment Manufacturers	❖ Help design a food preparation and salad bar space that meets your specifications (area, budget, capacity, renovation needs).
Contracted Food Service Companies	❖ Work with any existing food service companies to support the local food objectives of the program.
Distributors, Processors and Retailers	❖ May need to supplement food from farmers — work with them to see how they can help you to reach your program's goals.
Ministry of Agriculture Employees	❖ Support with agricultural education and sourcing local farms.
Other Local Schools and Farm To School Participants	❖ Help through sharing lessons learned, funding sources, and recipes.

chapter 4
DEVELOPING A VISION, GOALS, AND OBJECTIVES

In taking on this program, your team must decide what you are trying to accomplish: What is the vision? What are the goals? What are the objectives? Clarity about these matters will:

- ❖ Help to communicate and promote the program.
- ❖ Convey why the program is important to students and the community.
- ❖ Help to recruit material and human resources.
- ❖ Keep the program on track.
- ❖ Help to understand the success you are achieving.
- ❖ Guide evaluation and improvement.

Developing a Vision

A vision is a broad aspirational image or statement of the future. A vision tells others about the hopes, dreams and desires for your Farm to School Salad Bar Program. Creating a collective vision is one of the most important first steps in building a F2S team. It is an opportunity to ensure everyone has a voice in shaping the program, and that everyone is operating from the same page.

You can call this a "vision" or a "mission" or a "statement of purpose". It should be an overarching statement that you are all working towards.

Setting Goals

Once a vision is in place, the next step is to figure out how to get there with some goals:

A goal is a broad target that is set in order to realize your vision. Goals provide a general focus for the activities or the set of experiences your team plans to undertake.

All Farm to School programs share one common goal

- ❖ To Increase access to healthy, local and sustainably grown foods on school premises.

A Sample Vision Statement:

"A Carrot within Arms Reach"
– Oliver Elementary School, Oliver, BC

Community Garden, Tahsis, BC

Establishing Objectives

Objectives explain what is needed and by when in order to reach your goals. They are foundational to evaluating the success of your program, so remember to make them SMART:

- S — specific, significant, stretching.
- M — measurable, meaningful, motivational.
- A — agreed upon, attainable, achievable, acceptable, action-oriented.
- R — realistic, relevant, reasonable, rewarding, results-oriented.
- T — time-based, timely, tangible, trackable.

Examples:

- We will serve two lunches per week using locally-sourced ingredients
- We will build a garden this spring to support our program
- We will connect with at least two local farms to supply us with produce
- We will visit at least one farm this season so that we can develop a relationship with our farmer

Developing an Action Plan

The action plan helps to clarify how your group will accomplish their objectives in the quickest, most effective way. For each objective the group brainstorms the tasks that need to be accomplished. Questions for consideration during the brainstorming process include:

- What is needed to accomplish this objective?
- Where can we find the resources?
- How will the task be done?
- When it will be done? and
- Who will do it?

Salad Bar
Captain Meares Elementary and Secondary School, Tahsis, BC

To keep your F2S program on track:

- Work with your core team to prioritize the tasks that need to be done.
- Ensure each task is assigned to a team member with timelines.
- Encourage core team members to look outside for support in accomplishing objectives. You will often find your best workers and supporters are those that only have small windows of free time but are willing to commit to short-term projects.
- Schedule regular meetings to update on progress and ensure tasks do not fall by the wayside. Regular core team interaction and cooperation will help to establish the program and make the experience a positive one.
- Set time to acknowledge and celebrate successes. A thank you card, a packet of seeds, a strawberry plant, a coupon to the farmers market – are gifts that go a long way to inspire and motivate!
- Many F2S programs hire coordinators to do day-to-day jobs and ensure tasks get done. Sample job descriptions for F2S and Kitchen Coordinators are **available on the accompanying CD " Tools From the Shed".**

Evaluation

- It may seem odd to be discussing the end of the project already but until you decide how to judge your success, you may never know if you reached your goals. If you know ahead of time what you want to achieve, you can start taking measurements even before you start.
- Evaluation deserves a spot at the table in the initial planning stages. A well thought out evaluation enhances:

1. **Knowledge** – it contributes to understandings about the process to create the program and the impact of the program on students, parents, the school, farmer, and community;
2. **Planning** – it assists schools and farms in determining next steps and how to modify programs to achieve maximum benefits;
3. **Promotion and communication** – it creates opportunities for programs to share information with other similar programs and agencies.
4. **Funding potential**–results can be used to build a case for more funding.

How do you know your program is successful? Go back to your goals and see how they could be measured.

Gather both quantitative and qualitative data. Remember, the number of children participating and the amount of vegetables they consume only tells a part of the Farm to School story. A video of excited and smiling children filling their plates and tummies tells another.

Program: You know more local food is being consumed but understanding how much, from where and the dollar value, is important.

Methods of data collection: Keep track of # of meals served, # of children who participated, lbs of produce that was purchased, # of farms that participated, $ value of produce purchased.

Who	Methods of Collection
Students: Focus evaluation on changes in knowledge of local food and healthy eating, attitudes towards the program, behaviours regarding food choices and nutrition, academic performance, discipline, and activity patterns.	❖ Keep food diaries for 3-7 days before the program starts and then after and compare, ask children to recognize 5-7 different fruits and vegetables, changes in Body Mass Index (BMI), attendance at school.
Teachers: Look at the changes in knowledge and attitudes of teachers and school administrators, changes in dietary behaviours and changes in classroom curriculum.	❖ surveys, subjective observations.
Parents: Assess the level of interest and support of the program, determine if the F2S program is making changes in the home in terms of increasing healthy eating and bringing back the family dinner hour.	❖ surveys (before and after the program), subjective observations.
Farmers: Measure sales to schools, changes in planting patterns, adoption of sustainable farming practices, breakthroughs in handling distribution and transportation issues, prevention of farmland loss, increase in the number of farms or farmers in the region.	❖ sales receipts, local food maps, subjective observations.

Scope your evaluation to your available resources. If you have someone on board who has experience and/or skills in developing and implementing evaluation plans, processes and tools - wonderful! If you have someone on board who can capture the farm to school story – someone with writing, digital photography, or video recording experiences and skills – equally wonderful.

chapter 5
Ensuring Food Safety

Some schools have a full cafeteria-style kitchen with commercial equipment and large preparation surfaces. Others manage to run a salad bar program simply with a lone refrigerator, 3 sinks and a hot plate.

Whatever your facility, it should be adequate to ensure safe food handling and preparation. Consider the following questions: Where will the program operate in the school? Where will the foods be received, prepared, served and stored? Where will the children eat their foods? How will foods be transported from service to eating areas? What structural modifications are necessary? What equipment is needed?

Your Environmental Health Officer (EHO or Health Inspector) will help you identify if there are any issues with your facility and may suggest ways to adapt your program so that it continues to run safely.

Higher Risk Versus Lower Risk Foods

When produce (fruit or vegetable) is purchased in its whole state (uncut) from a local farm, it is typically considered a low risk food. As long as those handling the food maintain good hygiene and thoroughly wash the produce before it is served, there are few risks in terms of food safety. Producers should be following Good Agricultural Practices to help maintain the quality of the foods they supply.

Higher risk foods can include meat, fish, dairy, poultry, eggs, sprouts, cooked starches, soy proteins (e.g. tofu), and many sauces & gravies. When these foods are served in schools a different safety protocol is required. Being aware of this ensures the product is safe for the children.

It is highly recommended that you contact your EHO to review the site and discuss what kind of F2S program you'd like to have in your school. Follow the step-by-step process to ensuring your space is safe to use.

The Archibald's farm, Williams Lake BC

Developing Your Plans

1. Develop a plan for the construction / renovation of the kitchen

The plan should include details showing the layout of the kitchen, materials used for construction (e.g. flooring, wall finishes, countertops, lighting details, etc.), and types of kitchen equipment and their location. Keep in mind, the kitchen should be sized and equipped to meet the needs for the foods being prepared and served. Small spaces with limited equipment will dictate a small menu and foods that require basic preparation only. It is recommended that you refer your plan to the local EHO for comments and recommendations to ensure proper food safety.

2. Develop a food safety plan.

The food safety plan is a written guide for food handlers to help ensure that hazardous foods being served are handled appropriately at the various preparation stages. For each potentially hazardous food, it must:

- Identify all critical control points – a critical control point is a step in food preparation processing where a hazard can be controlled, such as cooking meat to 74°C for 15 seconds. Loss of control may result in an unacceptable health risk.
- Describe critical limits for those control points.
- List monitoring steps for each of the control points, such as reheat food to 74°C if the hot holding falls below 60C.
- Identify corrective actions if the monitoring shows the critical limit was not achieved.

For a food safety plan to work properly, the facility must be in control of basic procedures. These are often called "Pre-requisite Programs" or standard operating procedures. The Canadian Food Inspection Agency "Guide to Food Safety" document is a good starting point. The BCCDC booklet "Food Protection-Vital to your Business" may also be quite helpful.

It is a good idea to have your local EHO review the food safety plan to ensure all the critical control points have been identified and adequate critical limits and corrective actions have been established.

3. Develop a sanitation plan.

A sanitation plan is a written guide for the food handlers on cleaning and maintenance of the facility. It should include:

- The cleaning and sanitizing requirements for the equipment used in the facility, as well as for the facility itself. A cleaning schedule can assist staff in determining the frequency of specific tasks
- A list of the cleaning and sanitizing agents to be used, what they will be used for and their concentrations for the different tasks.
- Identification of any pesticides used in the facility, along with their specific uses and their storage requirements.

4. Ensure appropriate staff receive FOODSAFE training

FOODSAFE certification (or equivalent training) ensures those handling food have a suitable level of understanding of the precautions needed to prevent food borne illness.

Great Food Safety Resources

Food safety resources designed specifically for F2S programs have been developed and are available on the accompanying CD " Tools From the Shed".

Topics include:

- ❖ Farm to School Kitchen GUIDELINES
- ❖ Food Safety and Sanitation Plan TEMPLATE
- ❖ Sample Food Safety CHECKLIST

Don't hesitate to contact other schools involved in the Farm to School program to learn of their experiences and perhaps a tip or two.

chapter 6
Engaging Farmers, Parents, Students and Others

Engaging Local Farmers

Farm to School is about connecting children to their land, their farmers, and their food. It is about closing the distance between the field and the classroom. It is about building relationships between farm and school. Without a farm, the program is just another salad bar. Contact information for all of the organizations is on the resource list at the back of the manual.

Students at Chetwynd Secondary School, Chetwynd, BC

Who can help you find a local farmer?

- BC Farmers Market Association
- Certified Organic Association of BC
- Farmers involved in other Farm to School programs
- BC Food System Network
- Ministry of Agriculture Regional Coordinators

Most farmers are happy to chat by phone or via e-mail, especially in the evenings. It can be quite difficult to leave the farm during the growing season so offering to come out to the farm is a great initial step to creating a relationship.

Find opportunities for face-to-face connections.

- Students can visit/work at the farmers market.
- Students can visit/work on the farm.
- Farmers can be invited to the school to sample the salad bar, to help establish a school garden, to demonstrate composting, gardening, seed saving, etc.

Ideally, a farmer should be on your core team. Engaging a farmer as early as possible enables that person to shape the program and experiences on the farm. **Fall and early winter** are ideal times to have these discussions, before farmers place their seed orders.

Some of the things to keep in mind when contacting farmers:

- **Growing season vs the school season**: Depending on the region in BC, September to June can be a difficult time to source fresh produce. With the help of greenhouse, processing and root cellars, produce can be made available. Ask them what (type and quality) can be grown this year? What could we add for next year? What will the school need to supplement with other sources? For a list of what produce is available in which season, refer to **the accompanying CD " Tools From the Shed"**.

- **Menu design**: How can we maximize local food in the menu? How can we use staple items in multiple recipes? What foods will be ready when?

- **Quantity**: How many students will be participating? How much will they eat over the course of a school year? The quantities required by most F2S programs are relatively small for farmers so it is important to recognize that the social benefit to farmers from taking part in F2S may be greater than the economic benefit.

- **Distribution**: What is the best and most efficient way to get the produce from the farm to the school? Schools often expect farmers to make a delivery on a set date. Keep in mind that this could require a special trip to town for the farmer which may not be viable in terms of cost or time allocation. Work with your farmer/distributor to understand his/her schedule and see if you can piggyback on delivery dates that are already in place.

The accompanying " Tools From the Shed" CD has some great resources on how to work with your farmer, including financial templates, sample purchase orders, and templates that farmers can use to indicate their interest in providing produce.

- **Payments schedules**: Farmers who sell direct to their customers are often used to being paid immediately. If this is doable, great. If not, talk to your grower about what payment schedules are like in your school so that there are no false expectations.

- **Promotion**: How can we create community wide excitement and interest around this program? Can farms and schools collaborate in communication and marketing around F2S?

Schools actively engaged in the F2S program recommend securing more than one farmer to reduce supplier stress, increase variety, and ensure long-term supply of local food. The strongest programs have farmers on board who identify with the goals of the program, are happy to engage with students and to educate them on local farming, and who are willing to be part of a program that will be developing for years to come. The closer the farm is located to the school, the easier it is for everyone involved. Distribution costs will be less expensive, time demands on the school and farm will be lower, students will have a better opportunity to visit the farmer, and fewer greenhouse gases will be emitted.

Discuss opportunities such as increasing local food production, creating a generation of young farmers, reconnecting people to food and the land, and creating stronger connections between farmers and other people in the community.

Engaging Volunteers

Volunteers are the mainstay of any F2S program. The program relies on the energy and passion that volunteers bring to kitchen and classroom. Volunteers may assist by:

- Developing recipes.
- Preparing foods.
- Helping students serve themselves.
- Reminding students of etiquette and manners.
- Encouraging students to try new foods.
- Answering students' questions.
- Ordering and shopping for food and other items.
- Washing dishes and cleaning up.
- Helping plan menus.
- Searching for ideas on using local food in new ways.
- Helping with fundraising events or field trips.
- Promoting and communicating the program to others.
- Recruiting additional volunteers.

Salad Bar at Oliver Elementary school, Oliver, BC

Recruiting And Coordinating Volunteers

The majority of your volunteers are likely to come from families of the children you are serving but, as with your core team, it is good to have a diversified group representing different aspects of your community. Develop a one-page information sheet that describes your program, its location and a brief description of what volunteers can do to help. Once you have this, you are ready to start the recruiting process.

When recruiting, make sure you have involvement from your principal, administrative staff, and/or teachers. If you are in a primary school, look to local high schools for volunteers. Many organizations, business and service groups encourage volunteerism. Consider any School Board policies or guidelines regarding volunteers working with school children.

Once you have familiarized yourself with the guidelines, reach out to your community. Here are some ideas for how to reach out to volunteers:

- ❖ Talk to religious organizations, cultural associations, Friendship Centres, seniors' clubs, service clubs, business associations, the Girl Guides and Boy Scouts, your local health unit volunteer coordinator, and any other group within your community.
- ❖ Tap into your network to get the word out about your program and the great impact it will have on the community if well-supported.
- ❖ Look for passionate people that are well-known in the community. Start by looking for certain parents that fit this description and may be willing to help you build your volunteer network over time.
- ❖ Approach leaders or administrators about volunteers for programs at First Nations schools or schools that have children from local First Nations communities.

Ways to Recruit Volunteers:

- ❖ Talk to the PAC.
- ❖ Send flyers home with students.
- ❖ Post flyers at local community centres.
- ❖ Advertise in local newspapers.
- ❖ Request space in local church or service group newsletters.
- ❖ Ask to speak at a service group or business luncheon.
- ❖ Ask local faith leaders to encourage congregations to participate.

Keeping Volunteers Motivated

Maintain volunteers' motivation and enthusiasm by regular encouraging and acknowledging their contributions to the program's successes. Celebrate often!

Upon signing up to help you out, volunteers should expect to receive three things to clarify their role in the F2S program:

1. **Roles and Responsibilities:** Outline what the responsibilities and benefits are for participating in F2S as a volunteer.
2. **Training:** Provide volunteers with the training and tools necessary to instill a sense of pride in a job well done. Develop a volunteer manual that gives your volunteers the resources they need to do their job well and safely.
3. **Schedule:** Provide volunteers with a work schedule that reflects their personal time commitment. Also provide instructions on who to call should something come up that will interfere with the schedule.

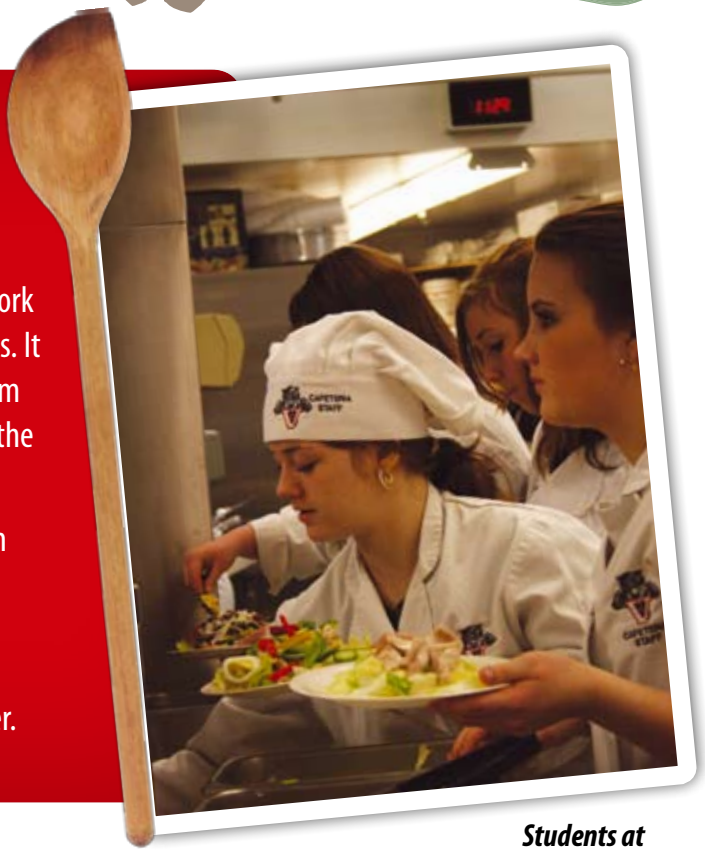
Volunteers will be attracted to what they identify with, so take time to figure out what that may be in your community. Here are some general selling points to attract volunteers:

- Make a difference in the lives of our children and youth.
- Help ensure no child in our school goes hungry.
- Support our local farmers and the farming community.
- Get FOODSAFE Training.
- Enjoy free tasty, healthy, and local meals.
- Learn about local food, where to find it, and delicious ways to dish it up!
- Learn about ways to go green in the kitchen.
- Learn about gardening, root cellars, canning, composting and more.
- Meet others in a fun atmosphere.

Keeping Volunteers Juiced Up

It takes a team of dedicated individuals to make Farm to School work and in smaller communities the same people tend to do many jobs. It is critical not to take on too much, especially in the beginning. Farm to School does not have to start off on a weekly basis throughout the school term. Start once a month or once a season.

In addition, engage those who haven't been engaged before. High school students often need to fulfill a certain number of hours of volunteer work. Seniors come with many skills, especially in food growing and preparing. Sometimes the simple task of asking someone personally can turn a non-volunteer into a team member.



Students at Vernon Secondary School, Vernon, BC

TIP: Organize volunteers into two teams: preparation and clean-up. Each team should expect to spend 2-3 hours at the school per F2S day. Here are a few great ideas to acknowledge and honour your volunteers:

- Maintain close contact with each.
- Encourage volunteers to suggest ideas and incorporate those ideas.
- Keep them up to date with how the program is going.
- Hold regular gatherings to encourage and thank volunteers for their efforts.
- Ensure they are well taken care of during their efforts (offer free meals, coffee and other drinks).
- Have the students make cards for volunteers on special occasions such as Valentine's Day, Volunteer Day (December 5), and birthdays.
- Have a 'Generous People' board that displays all your volunteers' pictures, names and something about themselves.
- When a new volunteer starts, name the lunch or menu items after them (e.g., 'Sally's Spinach Salad').
- Plan a few special days in the year that recognize all the work your volunteers do. Pamper them with a meal served by students or a little gift that will make them feel special.
- Give them a recognition award during a school assembly or at an end of the year awards event.
- Purchase a stereo for the kitchen – a little rhythm cures any blues.

chapter 7
Equipment Needed

Basic Farm to School Equipment List

A large refrigerator is essential – even if you are feeding a handful of students. Two large refrigerators or a large cooler will be necessary if you are feeding more than 50 children. You will be receiving large quantities of food and primarily fruits and vegetables. Milk, dairy, eggs and meats must go in the refrigerator. Fruits and vegetables are best stored in the refrigerator, but a cool place like a root cellar will work as well.

A sink is also required. It must have 2-3 compartments if a commercial dishwasher is not purchased.

The rest of the kitchen equipment needed for a Farm to School meal service can vary quite a bit - depending on a number of factors - from the type of program you wish to run, meal service and equipment already in place at the school, the staff available to prepare the meals, to the quantity and types of foods available from nearby farms, to the food culture and/or dietary needs of the students.

One of the most popular and successful Farm to School programs has been the Farm to School Salad Bar program

The typical salad bar service allows children to choose from a variety of foods including 6 vegetables, 3 fruit, 1 protein and 1 grain serving. Many schools also include soup with their salad bar service, especially in the winter months when there is an abundance of root vegetables that work well in a soup and not so well in a salad bar.

Students at Sen Pok Chin School, Oliver, BC

Minimally this program requires a salad bar unit containing the following equipment:

Standard Salad Bar Unit

A table-top salad bar kit including the following items is essential:

- 1x Table Top Salad Bar w/ Sneeze Guard.
- 1x Rectangular Table Top Hot Food Warmer.
- 4x Plastic Serving Spoons.
- 4x Clear Squeeze Bottles.
- 4x Tubs w/Clear Lids.
- 2x Stainless Steel Bowls.
- 2x Clear Plastic Bowls.
- 2x Clear Plastic Food Saver Tubs w/ Lids.
- 8x Stainless Steel Spoons.
- 16x Stainless Steel Tongs.
- 3x Clear Plastic Full Size Inserts.
- 3x Clear Plastic Full Size Lids.
- 4x Clear Plastic ½ Size Inserts.
- 4x Clear Plastic ½ Size Lids.
- 4x Clear Plastic ¼ Size Inserts.
- 4x Clear Plastic ¼ Size Lids.
- 3X Large Cutting Boards.
- 3X Sharp Knives (various sizes).

Current pricing indicates that a standard table-top unit costs approximately $1300 plus tax. More details are available **on the accompanying CD " Tools From the Shed"**. One table-top salad bar kit serves approximately 150 children in 15- 30 minutes.

The addition of a hearty pot of soup or chili or stew to the program requires additional equipment, which can be found **on the accompanying CD " Tools From the Shed"**.

Other Basic Kitchen Needs

- Measuring cups.
- A food processor.
- A strainer/colander.
- A large salad spinner.
- Ice packs.
- Thermometers and a probe thermometer.
- Can openers.
- Tin foil.
- Plates and bowls (dishwasher safe).
- Forks, knives, and spoons.
- Detergent.
- Sanitizer.
- Wash cloths and tea towels.
- Aprons.
- Hats/hair nets.
- Rubber gloves.
- Liquid soap.
- Paper towels.

Additional Useful Equipment Items:

- A stove is not absolutely necessary, but will certainly help – especially in the preparation of hot soups, stews, and one-dish meals that often accompany a salad bar. Optional small equipment may be purchased to serve hot foods –A slow cooker or a soup warmer are good examples.
- A commercial dishwasher is not absolutely necessary but will certainly help. In addition to ensuring dishes are properly cleaned and sanitized, dishwashers cut down on waste. Speak to your Environmental Health Officer (EHO) to discuss your specific situation. Imagine the amount of paper, plastic and Styrofoam that will not end up in the local landfill when real dishes and cutlery are used instead of disposable products. While the investment may seem large upfront, over time the savings considerable economically and environmentally.
- A freezer is not absolutely necessary but will certainly help. Freezing local foods is one way to store them longer so that they can be enjoyed all year long!
- A root cellar is not absolutely necessary, but like the freezer, it will help to store local foods. Children will be able to enjoy fresh local root vegetables - like carrots, potatoes, beets, squash, onions, and cabbage - all year long.

Kitchen at the Heart of Lake Kathlyn School

"The kitchen brought people into our school that had never been there. Grandparents, community members, Board of Education Trustees, and even other schools came to see what "all the fuss was about". Many of these people have become volunteers. The kitchen has also enriched our life skills program and leadership groups - It has provided a place which has enhanced the self esteem of many of our kids. It has become a social gathering place as well. I often comment that they are "having way too much fun in there" as I walk past hearing the laughter and animated conversations." Warren Kluss, Principal, Lake Kathlyn School, Smithers, BC.

chapter 8
Menu Development – Where to Start?

Menu Development – Where to Start?

Creating menus to meet everyone's needs can be a complex process, but the satisfaction of seeing eager young faces light up at the sight of the feast of local greens will make it all worthwhile! Menu development varies from program to program, but the general theme is to start with the farmers.

What do farmers have to say?

"The approach that I am most in favour of, and it makes sense from a farmer's perspective, would be to list all the products that I can grow, present it to the school. The school would look at the list and say 'Okay, we have this many students, and these types of products available, so we can make up these recipes, and then we can project what recipes and menus we will be using.' Then the school can come back to me and say this is roughly how much we need of this product this week and that product that week."

— Thomas Tumbach, Farmer and Owner of Localmotive Organic Delivery in Okanagan Falls, BC providing food to five schools in the South Okanagan.

A eureka moment for our Farm to School Program was when we realized our local food should drive our menu, not creating a menu, then trying to find local food. One challenge for our Farm to School program was to record and track the amount of local food in our salad bar. This year we went bold - we purchased 2000 pounds of local food including red peppers, potatoes, carrots, cherries, squash and fruit - the onus then became what to do with it. It forced us to be innovative and build relationships for processing and storing; our preservation piece was born.

Marj Basso, Oliver Elementary School

The farmer provides a list of foods that can be produced on the farm for the school. The farmer also provides an estimate of how much food can be provided and a sense of when different foods are available. If more than one farmer is involved with one school, it is important that they coordinate with each other to give the school a realistic picture of what is available.

Once the farmers have provided an understanding of what they can provide, the coordinator spends some time browsing the list and creating menus and recipes that will satisfy the principles, goals, and objectives of the F2S program. The focus will be on using recipes that use local, seasonal product before looking at other recipes . The community nutritionist at the local health unit will be an excellent resource during this time.

Once a menu has been developed, scaling up and then ordering from a farmer can be complex. A "Sample Menu Spreadsheet" is **available on the accompanying CD " Tools From the Shed"** which provides some examples of converting menus into orders.

"I start out by doing the basics — tomatoes, cucumbers, lettuce, carrots — I go heavy on them and make them last as long as possible — then I add specialty things every once and awhile."

Gary Martens, Corral Farms, Williams Lake, BC.

"The best thing I've found about F2S is seeing the kids try new things. Witnessing the moment when a child tries something different and takes that first crucial step in developing his or her palate, that's special."

Silvie Keen, School Meal Coordinator, Tahsis

Tips for recipe and menu development

- Use Canada's Food Guide to help you in choosing healthier options.
- Remember, recipes must follow the Guidelines for Food and Beverages Sold in BC Schools.
- "Tips and Recipes for Quantity Cooking: Nourishing Minds and Bodies" is a great resource with plenty of healthy recipes that meet the guidelines.
- A student survey based on the foods that your farmer can provide would help you understand what your students are interested in and what would make your salad bar popular.
- Look for creative ways to discover new menus and recipes, talk to other schools and organizations in your area that may be doing the same thing. Consider a community recipe contest to tap into local knowledge and as a means to announce the program and get people involved.
- Recipes should be culturally appropriate and sensitive to student food preferences and/or special dietary needs, with special emphasis on nut-free recipes. Connect with community nutritionists, and coordinators of existing food programs in and around your community for ideas and resources to assist with this.
- Plan your menus to use potential leftovers from the salad bar earlier in the week. This will help reduce waste (setting an example for students) and food costs (helping feasibility).
- Encourage the farmers to the review the menus and recipes. They may know of additional recipes and/or ways to use their products!
- Consider incorporating traditional foods in your menu.

Winter Months = Preserved Food

Just because tomatoes and berries don't grow in the winter & early spring doesn't mean they can't be served. With a bit of planning in the summer months, canned or dehydrated tomatoes can be added to soups & stews and frozen berries can show up in the salad bar or baked into muffins. It's surprising how many kids love dehydrated kale, as long as you call them "kale chips"!

Here's a sample salad bar set up from Captain Meare's School in Tahsis, BC

Items for the salad bar: lettuce, carrots, tomatoes, cucumbers, celery sticks, roasted beets, dried cranberries, apricots, grapes, whole wheat croutons, drained kidney beans, Fibre 1 cereal, pita chips with homous.

"The Farm to School Salad Bar program aims to improve student fruit and vegetable consumption while supporting local farms and the local food economy. While it is not the same as a school meal program – where the focus is to ensure children have 1/3 of their daily nutrition requirements at each setting - Farm to School Salad Bar can complement existing school meal programs. Rounding up the nutrition by adding a serving of milk or dairy products is highly encouraged!"

Joanne Bays, Project Manager, Farm to School Salad Bar.

Sample Menus

In BC programs, at each salad bar service children are offered a choice of:

- 6 vegetables (fresh leafy greens, sliced cucumber, cherry tomatoes, celery sticks, julienned carrots etc..)
- 3 fruits (fresh, frozen, or dried berries, peaches, pears, apples etc…)
- 1 grain or bread (a whole wheat bun, tortilla, pita, etc..) and
- 1 meat or alternative (local beef jerky, grated cheddar cheese, boiled egg, tuna fish, chickpeas, etc…).
- Foods high in salt, fat and sugar are limited.

Sample Menu – Tahsis, BC

- **Spring:** Minestrone, Romaine Salad with Strawberries, Feta Cheese and Sunflower Seeds, Creamy Strawberry Dressing, Asparagus, Cucumbers, Carrot Sticks, Cherry Tomatoes.
- **Summer:** Asian Chicken Vegetable Soup, Couscous Apricot Chickpea Salad, Iceberg Lettuce, Balsamic Vinaigrette, Spinach, Roma Tomato Wedges, Mini Carrots, Seasonal Fruit.
- **Fall:** Sunshine Soup (Squash/Carrot/Ginger), Chicken Caesar Wraps, Pasta Salad, Apple Cranberry Maple Slaw, Carrots, Tomatoes, Cucumbers and Apple Crisp with Honey Yogurt.
- **Winter:** Moroccan Chicken Stew, Basmati Rice, Romaine Salad, Cukes, Carrots, Tomatoes, Roasted Beets and Parsnips, Poached Pears (supplemented with root vegetables from the Community Garden).

More Tips

- Vary the selection and use themes to entice the kids to keep coming back.
- (Try a Mexican Madness Monday or a Go Greek Week).
- Serve a hot soup or stew or entrée with during each salad bar service (try beet borscht, hearty vegetable, or black bean).
- Try a mixed salad: coleslaw, caesar, apple waldorf, or thai noodle salad).
- Mix up the colours, textures and shapes! Remember we eat with our eyes first. Imagine a spread of fresh leafy greens, cherry tomatoes, roasted asparagus spears, julienned yellow, green and red peppers, sliced cucumbers, chopped green onions, grated cheddar cheese, toasted garlic bread, and vegetarian chili.
- Keep the containers full. Children should feel comfortable taking adequate portions.
- Clean up spills and messes quickly.
- Feature a local food. Add colourful signage near the food. Describe the food - the farmer who produced it, the distance it traveled to get to the salad bar, and the nutritional content.

chapter 9
RECIPES

While it's difficult to find recipes that could be used anywhere, anytime, giving examples of what other Farm to School Projects have developed can help get the creative juices flowing. Interestingly, almost all the recipes sent in had carrots in them so we decided to look at the carrot and show how learning could happen both in the kitchen and in the classroom. Don't let the seasonal guides discourage you from trying a spring item in winter. If you have the ingredients, go for it!

Carrots are pretty impressive in that they can be seeded at different times of the year and then stored either in the ground or in root cellars so that we have them available year-round. Where soil temperatures allow, carrots can be seeded as early as April for a harvest before the end of school. Summer carrots can sometimes be overwintered in the ground or stored in root cellars/cold storage.

Carrot facts

- Did you know that carrots are related to parsnips, dill & parsley? They belong to the Umbilliferae Family. The flowers of these plants are umbrella-shaped and very attractive to beneficial insects like hover flies and ladybugs.
- Carrots are not just orange! Their colours range from white to yellow to red to even purple. Try planting some Purple Haze, Atomic Red, Yellow Sun or White Satin and do a taste test.
- Carrots originated in present-day Afghanistan 5000 years ago. Originally, the seeds were prized for medicinal purposes, not the roots!
- Carrot rust fly is a huge pest for carrot growers. They sense carrots growing by the scent that the leaves give off. The flies lay their eggs in the soil next to the carrots and then the larvae tunnel through the roots. There are sometimes 3 generations per season!
- Activity: Grow carrot tops in class! Carrot tops are usually discarded for compost. Instead, save a top with about an inch of carrot attached. Plant the tops in soil or immerse them in water (like you would an avocado seed). Measure the growth of the greens over time. A fun activity for the dead of winter.

Spring

Funnily enough, spring is one of the more difficult times to find and use local foods. Most stored vegetables are done and greens have not quite come into production. Nanaimo Food Share provides a wonderful alternative –using applesauce that's put up in the fall, adding shredded carrots, turning it into a nutritious carrot desert in a cup!!

Carrot "cake" in a cup

1 Apple Sauce Recipe (see below0
500gr Raisins
20gr Cinnamon
1kg Carrots peeled and grated

Follow the Apple Sauce recipe below. When the apple sauce is cooked, bring to a boil, add the grated carrots, cinnamon and raisins stir and remove from the stove and let cool. Serve in bowls or cups.

Apple Sauce

5kg Apples peeled, cored and chopped
500 ml Water more if needed

Place apples and water in a large pot. Place the pot on the stove at medium to medium-low heat and cover. With a wooden spoon stir the apples often to make sure they do not stick to the bottom of the pot and burn. Stew the apples for about an hour. All apples are different so the cooking time will vary along with the amount of water needed.

Fall

Minestrone (Big Soup)

One of the nice things about this recipe is that it is extremely flexible and can be adapted to use whatever produce you have. No potatoes? Use pasta instead. No fresh tomatoes? You can use canned instead. Substitute zucchini with squash or try kale, or even turnips for the other veggies. You can also substitute with other canned beans or lentils. *Adapted from Barb Finley's Project CHEF Recipes*

Ingredients:

1 big onion, chopped
2 tbsp olive oil
1 garlic clove, crushed
1 celery stalk, chopped
2 Roma tomatoes, seeded & chopped
5 baby potatoes or 2 larger ones, chopped
1 zucchini, chopped
1 carrot, chopped
4 cups broth
1 tsp dried thyme or sage or rosemary
Salt
1 can cannellini beans, drained

Method

Sauté onion in olive oil until soft. Add garlic & celery and stir until celery is transparent.

Add tomatoes and stir. Add the rest of the vegetables and mix well. Add broth and bring to a boil. Add the seasonings & salt. Mix and taste and adjust the amount of spice and salt according to your taste. Now let it simmer till all the vegetables are soft. Add the beans, turn off the heat and cover the pot with a lid. Let soup stand for 5-10 mins. and serve when hot with a piece of fresh bread. Add water if soup become too thick.

Winter

Sunshine Soup

This soup is from Tahsis, where we get nearly 11 feet of rain annually and on average, it rains 209 days of the year. We need all the sunshine we can get. Sunshine soup works its magic and brings the sun to our village, warming bellies at the same time.

Ingredients:

2 large butternut squash
4 onions, chopped
4" piece of fresh ginger, peeled and grated
4 cloves garlic, peeled and chopped
¼ - ½ cup olive oil
1 cinnamon stick
4 bay leaves
salt & pepper to taste
5 lb bag of carrots, peeled and cut into ½" pieces
6 litres liquid: vegetable or chicken stock, water or a mixture of stock & water

Method

Preheat oven to 350 °. Cut squash in half from end to end, scrape out seeds and place cut side down on parchment lined baking sheet. Roast for about an hour, or until tender. When cool enough to handle, scrape flesh away from skin and set aside.

Meanwhile, put enough olive oil to cover the bottom of a large skillet. Add onions, garlic and ginger. Cook until onion just starts to colour. Transfer to a large stock pot along with chopped carrots, the cinnamon stick and the bay leaves. Add stock/water to cover by about 4".
Bring to boil then simmer until carrots are almost tender – about 30 minutes. Add the reserved squash to pot and cook 15 minutes more. Remove bay leaves and cinnamon stick. Puree the soup until velvety smooth. Yield: about 15 litres soup.

Sassafras Cabbage and Apple Coleslaw

When lettuce and spinach are difficult to find, here's a great salad recipe using winter veggies from Chef April Ottesen of Sassafras Savouries in Prince George BC.

The apples make this coleslaw quite delightful, with an extra sweet and sour crunch. Not only that, but it is packed with vitamin C! At Sassafras, we get our cabbages locally from September to February from Caribou Growers. When that supply runs out, we always try to obtain BC cabbages at the very least.

15 minutes to prepare.

Makes 8 – 10, ½ cup servings.

Ingredients:

1 small head of cabbage, shredded (approximately 8 cups shredded)
1 large stalk of celery, thinly sliced
1 large carrot, grated
2 crispy apples, peeled, cored and chopped (plus 1 tablespoon of lemon juice from dressing to prevent browning)
2 green onions finely sliced

Dressing

½ cup mayonnaise
1 tsp. sugar
¼ tsp. salt
¼ tsp. pepper
1 tbsp. pickled banana pepper juice (or 1 tbsp white vinegar and a dash of cayenne pepper)

Method

- Prepare all vegetables and toss together in large bowl
- In a separate bowl, mix all ingredients for the dressing
- Pour the dressing over the mixed vegetables, toss, and taste for seasoning
- Adjust seasoning as necessary

chapter 10
Sourcing and Ordering Local Foods

Getting fresh local fruits and vegetables in a school salad bar – during winter months and in northern, rural and remote communities– requires a very special group of people. It requires a team that understands the complexities and challenges involved in a local truly local food system. It requires a team that has a commitment to ensure the "farm" remains in Farm to School. It requires a team of people who are resourceful, creative, practical and above all else willing to roll up their sleeves to do the upfront legwork to make this happen!

Here are a few key milestones in the path to get local on the kitchen:

- ❖ Know what local foods are available and when they are available.
- ❖ Know which farmers are ready and willing to supply these foods.
- ❖ Gather recipes and plan menus around the foods that are available.
- ❖ Understand the types of local foods, and the approximate quantities of such foods that may needed to fill the salad bar each week.
- ❖ Develop an agreement with one or more farmers.
- ❖ Order the foods.
- ❖ Meet regularly with the farmer to review the process.

When fresh produce is only available on occasional basis, organizing your menu becomes critical to preventing waste. Order perishables like lettuce and salad greens but combine your order with hardier vegetables like cabbage and root crops. Use the perishables at the beginning of the week and then finish off with the veggies that store longer.

In areas where fresh produce is only brought in through a distributor on a weekly basis, sourcing local produce can be a challenge. Persevere! Keep asking your supplier to source from BC producers. Some distributors like SPUD specialize in local & organic produce and deliver to many areas in BC.

Local Food Maps

A local food map is an excellent resource for locating farmers and sourcing local foods. The Ministry of Agriculture has Farm Fresh maps showing the locations of some farms offering local fare. As well, a number of communities have created their own local food directories. Contact your community nutritionist at your local health unit for assistance.

Create you own local food map!

One of the ways to move local food forward is to create a local food map. Engage your F2S team in processes to identify local seasonal food resources. Identify what food is available, where, and when. Map the data onto a colourful brochure. Promote local farmers, growers and distribution networks where you can get local food. Bring the community into the development of the map and hold an event to celebrate its release.

Understanding Quantities

Salad Bars in Schools – A Fresh Approach to Lunch helped guide the development of Farm To School programs in Ontario. They have provided the following outline of food quantities necessary to serve 120 students. This is only a template to help coordinators understand the volume of food necessary. Please remember the produce, protein, dairy and grain products should reflect the desires of the school and community and be as local as possible.

PRODUCE ON HAND FOR EVERY SALAD BAR LUNCH

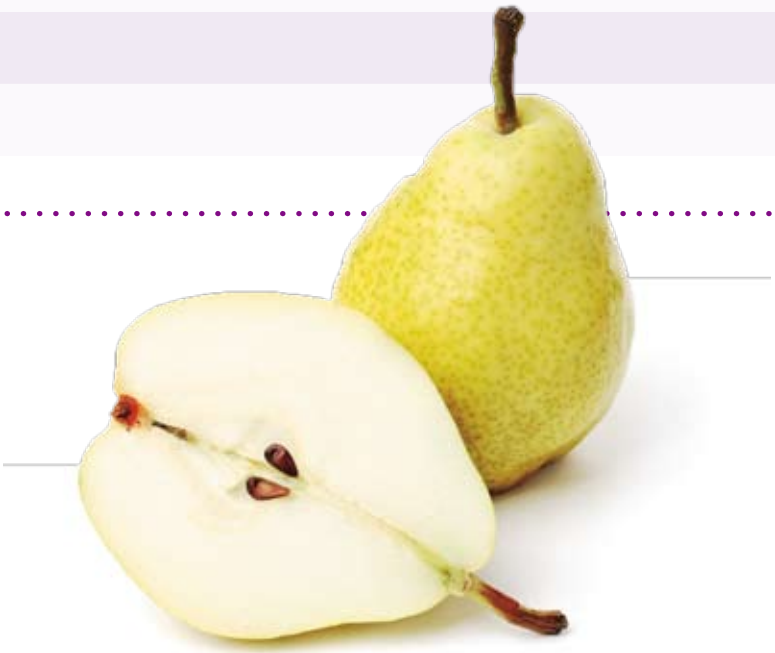
Greens Choose 1	amount per case	number of cases
Lettuce		
Romaine/Iceberg	24 count	0.5 case
Spring Mix	3 lbs	0.5 case
Vegetables Choose 5	**amount per case**	**number of cases**
Mini Carrots	10 – 2 lb bags	1 case
Cherry Tomatoes	12 pints	1 case
Broccoli	# varies	0.5 case
Cauliflower	# varies	0.5 case
Celery	24 count	0.5 case
Mushrooms	12 packages	0.5 case
Potatoes	10 lb bags	2 bags
English Cucumbers	14 count	2 cases
Green Peppers	40 count	0.5 case
Red Peppers	40 count	0.5 case
Snow Peas	3 lbs	0.5 case
Sugar Snaps	3 lbs	0.5 case

** Counts vary depending on the size of the fruit/vegetable*

Produce on hand for every salad bar lunch

Fruits Choose 3	amount per case	number of cases
Apples	100 count	1 case
Pears	80 count	1 case
Cantaloupe	18 count	0.5 case
Honeydew Melon	8 count	1 case
Watermelon	1 count	3 units
Strawberries		
Blueberries		
Raspberries		
Huckleberries		
Soapberries (fresh, frozen or dried)		
Peaches		
Plums (fresh, dried, frozen or canned)		

** Counts vary depending on the size of the fruit/vegetable*



MEATS / ALTERNATIVES AND GRAINS ON HAND FOR EVERY SALAD BAR LUNCH

Grains Choose 1	no. / size of package	amount per package
Whole Wheat Macaroni	2 – 2.27 kg bags	
Taco Shells	8 – 468 gram boxes	36 shells / box
Brown Rice	4 – 900 gram boxes	0.5 cases
Orzo Pasta	2 – 450 gram bags	1 case
Whole Grain Wraps	24 packages	10 per package 6"
Whole Grain Buns	10 packages	24 per package
Whole Wheat Pita	20 packages	6 per package
Pumpernickel Bread	6 loaves	
High-fibre Melba Toast	4 – 350 gram boxes	
Whole Wheat Bagels	10 packages	6 per package
Whole Wheat Rotini	1 – 2.27 kg bag	
7 Grain Bread	12 loaves	
Baked Bannock		

Meats / Alternatives and Grains on Hand for Every Salad Bar Lunch

Meats / Alternatives Choose 1	no. / size of package	amount per package
Cheese		
Halal Cheddar	10 – 600 gram blocks	
Monteray Jack	4 – 600 gram blocks	
Feta	1 – 5 lb tub	
Milk	1 or 2%	2 litres
Salmon, canned	24 – 230 gram tins	
Tuna, canned	48 – 120 gram tins	
Tofu	10 – 350 gram packages, extra firm	
Textured Vegetable Protein	10 – 454 gram packages, frozen	
Eggs	24 dozen	
Beans		
Pinto Beans	6 – 19 oz. tins	
Kidney Beans	6 – 19 oz. tins	
Black Beans	6 – 19 oz. tins	
Chickpeas	6 – 19 oz. tins	
Lentils	6 – 19 oz. tins	
White Beans	6 – 19 oz. tins	

Other items to have on-hand in your pantry: olive oil, dry seasonings (esp. Italian Seasoning Blend), pastas, fast cooking starches like couscous & quinoa, canned tomatoes, & vinegars.

How many volunteers do we need on salad bar days?

Rule of Thumb:

Two volunteers for the first fifty meals and one additional volunteer for every additional group of fifty meals.

How many hours do the volunteers work?

Rule of Thumb: Keep shifts to a maximum of 4 hours and once per week.

Sangan River Farm. Masset, BC

How many meals should our school plan to serve?

Rule of thumb: Students are hungry and some of them will want to come back for seconds and thirds. Calculate your number of meals served at every F2S day by taking the estimated number of students who will use the salad bar service and multiply that number by one quarter or 1.25. E.g. 120 students X 1.25= 150 meals per F2S day. This calculation is based on an average elementary student's intake. Adjust the intake to reflect the age and intake in your own school. If there are constantly leftovers, adjustments to this amount can be made.

Suggestions for Creating Agreements

Once farmers have an initial agreement to supply food to schools, the school and the farm should draw up finalized agreements that include the following components:

- Total estimated volume of each item to be delivered.
- Time an item will be ripe, when it will be delivered and acceptable seasonal substitutes.
- Amount and price of standing order items.
- Delivery schedule: time of day, frequency, and location.
- Packing requirements: standard box, grade, loose pack, bulk, etc.
- Postharvest handling practices; is the product pre-cooled?
- Processes for meeting health and safety standards.
- Cost per unit, payment terms, payment process.

For more ideas about working with farmers **check the accompanying CD " Tools From the Shed".**

Establishing Agreements Between Schools and Farmers

An agreement between school and farm is a promise on the part of the farmer to produce (and in some cases deliver) a specified type, quantity, and quality of food for school on specified dates for a specified length of time. For the school it is an agreement to purchase the specified type, quality, and quantity of foods at the specified times at an agreed upon price. For some farm to school relationships a handshake is all they require to seal the deal. In other instances, the school and/or the farm seek something more formal and on paper (**see the accompanying CD " Tools From the Shed"**)

Several face-to-face meetings between the farmer and school coordinator may be necessary before an agreement can be signed. Coordinators may want to visit the farm or cooperative site to inspect the fields and washing and cooling facilities.

Farmers wanting to establish and maintain agreements with schools should be particularly sensitive to the need to deliver their products in a timely manner that is consistent with food preparation schedules. Their products also need to be stored in a manner that retains product freshness until the contracted delivery time. Farmers may also need to adjust their production schedules and the manner in which they process and package their products to meet the needs of the school.

These are all topics that should be discussed among the core team, including the coordinator and farmers. The goal is to make things relatively easy for everyone.

chapter 11
FUNDING YOUR PROGRAM

Initial Start Up Funds

Farm to School Salad Bar Programs can be launched for as little as $1,500 (basic equipment, advertising etc) or for as much as $45,000 (the cost of a state of the art kitchen serving 500 students). Much depends on what is already available at the school and farm in terms of human and material resources.

For most BC F2S programs the purchase of kitchen equipment, and services to modify kitchen space were the two largest expenses. These one-time expenses needed to be paid up front. In addition most schools required start up funds to set up coordination, promotional, educational, and evaluation systems. Some schools were able to get the program to a point of self-financing in the first year of operation. Others are dependent on continued fundraising efforts.

What does it take to be self-financing?

- An equipped kitchen that has been inspected and approved by an environmental health officer.
- A paid coordinator, or a passionate and committed volunteer coordinator.
- A team of dedicated volunteers in the kitchen on salad bar days.
- A sufficient number of participants at each service.
- A willingness and ability of students to pay per meal.
- A financial system in place to ensure farmers receive a fair price for their food and, families pay for the meals in accordance to means and all children are able to participate regardless of means.

Rule of Thumb:

A program that is paying a farmer a fair market price for his foods, and has 150 participants per salad bar service who are each paying $3.00 per meal will generate about $100.00 revenue per salad bar service. This money can be used to pay for children who cannot afford to pay, or additional human and material resources to run the program.

Initial start-up funds can be raised in a variety of ways including:

- **Grants**: Money may be received from government organizations, foundations, or charitable organizations. Applications are often required and can require 6 months for processing.
- **Monetary Donations:** Donations can come from a number of sources — parents, community businesses, local service groups such as Rotary, Kiwanis, faith organizations, local unions, professional associations, etc. Often requires a letter writing campaign. Success requires a good letter, solid mailing list, cost of stamps and patience. Donations can lead to regular financial support from an organization in your community.
- **Fundraising Events:** Events can be a great way to increase awareness around F2S while fundraising for the project. Figure out what might work best by talking to other schools that have been involved in the program, connecting with your PAC about their fundraising experiences, and talk directly to the people you are trying to attract to the event.
- **In-Kind Donations:** Often businesses are willing to give product, supplies or equipment rather than cash. Target businesses in your community with items you may need for start-up or for ongoing operation.

Fundraising Ideas!

- Create and sell Farm to School calendars, recipe books, aprons, seed packages, or re-useable grocery bags.
- Grow your own food in a school garden and serve it on the salad bar.
- Invite other schools to visit your salad bar.
- Organize a Halloween trip to a pumpkin farm.
- Host a Christmas sleigh ride on a local farm.
- Organize a "Meet the Farm To School Team" barbeque.
- Host a local foods lunch with local celebrities.
- Try a food talent show.
- Host a spring fair. Sell bedding plants, poinsettias, bulbs, seeds etc.
- Organize a science fair focused on educating about local, nutritious food.
- Organize a community sponsorship drive (fundraising letter, funds thermometer in school entrance).
- Host a community harvest festival.
- Invite the community to a local foods potluck supper and dance.

"Most money comes from the community. Usually they have a vested interest in the project. Always start there. If you get a small amount of money, this can be leveraged to get other funds, possibly from grants. Most granters like to see that the applicant has tried to get funds on their own. Internally, the schools usually have some good fund-raisers. Try to collaborate instead of compete with other initiatives in the school for funding".
Rose Soneff, Program Manager, Community Capacity Building Strategy, Canadian Cancer Society of BC and the Yukon.

Daily Financing of the Program:

Parental contributions are essential to sustaining the program. Contributions begin with having parents that are able to contribute a reasonable amount for the lunch their children will receive at school.

A parental contribution system should be set up before the program begins. Ideally, this should be an 'advance payment' system to limit the need to handle money and food at the same time and lessen the chance of centering out a child who cannot afford to pay. Parental contributions, if managed properly, will take care of a substantial part of the on-going cost of your program.

Affordability & Accessibility

Farm to School should be available to every child who wants to participate, regardless of their ability to pay. Where parental contributions are limited, the Farm to School team can help supplement the cost of running the program by fundraising in the community. Speak to the Parental advisory council (PAC) about funding or connect with Community Links Funding sources. If a salad bar unit has been purchased, use the unit at other venues to generate funds.

Berry picking, Hazelton, BC

Each school is responsible for setting an appropriate charge for the Salad Bar Lunch, taking into consideration their school population, financial situation, etc. Most schools charge $3.00/meal.

In some schools, a sliding scale is used. This helps account for the difference in amount of food eaten by an 8-year old versus a 15-year old. Parents pay what they think is fair between a low and high amount. This has worked well in schools and should be supported with good information for parents about what their children are receiving.

At smaller schools, breaking even might be a greater challenge given that fewer students will be paying into the system. Finding alternative funding becomes more important in these situations.

Refer to the accompanying CD " Tools From the Shed" for lunch pricing from Nanaimo, Quamichan, and Vancouver.

Guidelines for Managing Parental Contributions:

- Have a solid system to manage collections – payment envelopes with monthly or weekly options indicating family name and number of students.
- Establish a method of communicating regularly with parents about the program, including reminders to 'get payments in'.
- Keep payments confidential.
- Consider establishing family discounts.
- Have a system to handle cash for emergency lunches – those who have not signed up but want to eat at the Salad Bar because it looks terrific or parents did not have time to make a lunch.

Ensuring all Students Have Equal Access

All BC F2S programs are guided by the principal that F2S can work for any child, in any school, and in any community. Where ever the program is implemented, local champions work to ensure all children have access regardless of their ability to pay. And whatever policy or process is put into place, local leads take care that they do not centre out a child in any way.

Some ways to ensure equitable access:

- Develop and adopt a school food and nutrition policy. It can be as basic as "no child shall go hungry while at school" to as broad as policy "all children shall have equitable, dignified access to local, healthy, safe, nutritious, and culturally appropriate foods and food programs while on school premises."
- Explore and integrate existing meal and snack programs and resources within the school.
- Explore and integrate existing meal and snack programs for children within and the broader community. (In First Nations communities it is a common practice that the band pays for the children's meal and snack programs while in school).
- Contact other Farm To School programs or school meal programs to discuss methods to overcome these challenges.
- Work with your Parent Advisory Council to explore ways to fundraise to ensure children can participate

chapter 12
READY, SET, LAUNCH!

Grandview Elementary School's Salad Bar program, Vancouver, BC

Your team is assembled, your kitchen inspected and safety plan in place, you have funding to purchase your equipment & food, menus developed and agreements with farmers in place. You're ready to go!!

Last minute checklists for set up prior to launch are **available on the accompanying CD " Tools From the Shed".**

But before you can launch, get the word out!

Develop your Campaign

The primary purpose of a promotional campaign is to increase participation in and/or support of the program. There are three key audiences for a promotion campaign: students, parents and the general community.

Excite students

- Screen short videos (see the accompanying CD " Tools From the Shed") - Ensuring the Future of Food, Every Lawn a Garden,
- The MEATRIX® I, II and II ½
- Jazz up the eating area – If a common eating area is available, excellent! Ensure the dining area is bright, colourful, comfortable and inviting. Large windows, cheerful paint, posters, chairs and tables can draw a crowd. Try tablecloths, flowers, and placemats.

Excite Parents

- Host a "Chef Night" were samples are prepared and recipes shared.
- Promote the program in school media – website, newsletter, Sample notices are available on the accompanying CD " Tools From the Shed".
- Invite parents to farm visits & education nights on topics like cooking skills, composting, seed starting etc.

Excite the general public

- Invite School Trustees, City Councilors & Key individuals to the Launch.
- Call your local radio and newspapers – a "good news" story is highly sought after.
- Profile farmers, the foods they produce, and where to get local foods (see the accompanying CD " Tools From the Shed" for sample profiles).
- Send your posters out to community centers & local libraries.
- Have a table at community events & farmers markets.

Sample posters are **available on the accompanying CD " Tools From the Shed".**

Here are some key messages to send out on your promotional material.

BC Farm to School Messages

- Dig In!
- Make the healthy choice the easy choice.
- Buy local foods.
- Buy fovods in season.
- Eat lots of vegetables and fruits - 5- 10 servings - every day.
- Choose wholesome fresh food over packaged and processed food.
- Choose water – Water is GREAT beverage choice!
- Know what is in your food and beverages.
- Take time to cook, eat and eat with others.
- Be food safe.
- Eat more from our own back yards.
- Taste a tomato today.
- Become a loca-vore.
- Eat fresh – grow smart.

chapter 13
FARM TO SCHOOL IN REMOTE & FIRST NATIONS COMMUNITIES

People in remote communities are unique. Because they are located so far from other communities and resources , they often have a strong sense of community and a "can do it" attitude. For each stumbling block they find a solution:

- ❖ No farm? Grow a garden
- ❖ No Soil? Truck it in!
- ❖ Volunteer burnout? Get others out.
- ❖ No funds? Build the program existing programs rather than creating a new one
- ❖ Not enough kids in the school to run a program? Open it up to the community.
- ❖ Foods spoiled when they arrive? Build a root cellar

They are pioneers, not so influenced by mainstream, so they cut new paths:

- ❖ Forest to school
- ❖ Fish to school

For remote communities, sourcing food from local producers can have an especially significant effect on bolstering the local food economy. Recognizing opportunities to reduce the cost of "importing" food to a remote location can grow local markets and go a long ways to encourage small-scale producers in remote locations.

Incorporating traditional food items on F2S menus can add a cultural component to the program while also adding to the nutritive and educational value of the program. Highlighting traditional foods in menus can lead to learning opportunities focused on food gathering, hunting and fishing.

Each year we affirm our identity and reinforce our ties to our indigenous food system and territories by harvesting and eating our traditional foods.

Healthy Food Guidelines for First Nations Communities

Incorporating Traditional Foods into School Menus

Types of traditional foods	Examples of incorporation into a school menu
Wild game such as moose, deer, & caribou	Jerky served in a salad bar, chili, stir-fry, moose stew
Salmon, oyster & other seafood	Seafood chowder, smoked salmon on bagels, canned salmon on salad
Seaweed	Dried & sprinkled over salads and soups or used to make "sushi" rolls
Berries	Eaten fresh or dried on top of a salad, baked into muffins, served on top of yogurt or pancakes

Traditional Food Facts Sheet by the Indigenous Health Council (**provided on the accompanying CD " Tools From the Shed"**), is a wonderful source of ideas and recipes using traditional foods.

Here's an example of one such recipe:

Salmon Soup

4 cups (1 L) water
¼ lb. (125 g) salmon roe
1 lb. (500 g) fresh salmon, cubed
½ lb. (250 g) potato, diced
1 stalk celery, diced
1 medium onion, diced
Salt and pepper to taste
Pinch curry powder
1 bay leaf
1 tbsp vegetable oil
Dry seaweed for garnish

In a large soup pot, sauté onion, celery and potato in oil. Add water and bring to a simmer. Heat salmon roe in a small saucepan and add to soup stock. Add salmon, salt, pepper, curry powder and bay leaf. Bring to a boil. Simmer over low heat until potatoes are just tender. Discard bay leaf. Ladle into soup bowls and sprinkle with dry seaweed. Source: Traditional Food Fact Sheets – First Nations Health Council

Although almost 50% of those surveyed in remote communities felt that they had ready access to fast food, over 30% had to drive more than 20km to find fresh produce. Clearly, access to fresh fruits and vegetables is an issue.

Communities across BC are increasing access to produce through a number of innovative projects. The community of Matsqui has developed a commercial greenhouse that supplies the residents with vegetable seedlings. Elders from the Squamish Nation started a community garden that supplies a community kitchen and events as well as local residents. Youth help to maintain the plots and learn from the teachings of the elders.

"Many communities are finding unique solutions: restoring the teachings between elders and youth with respect to food harvesting; planting traditional berries and other important plants in the backyard, on reserve, in a community garden or negotiating land use management plans with other levels of government and the private sector are part of the solution." – Healthy Food Guidelines for First Nations Communities.

As with any type of food, proper knowledge of harvest methods and preparation is essential to incorporating these foods safely into school menus. Elders are wonderful sources of information and understood how strict traditional methods were used to ensure that food remained healthy to eat.

As some methods may have changed over time, it is essential that those handling the food follow the correct steps to safely dress, transport, store and preserve. For more information, please see Healthy Food Guidelines for First Nations Communities (**provided on the accompanying CD " Tools From the Shed"**).

chapter 14
FOOD PRESERVATION

Chefs Sizzle, Richmond, BC

In many communities, fresh produce is not available year-round. However, by planning ahead, you can take advantage of when this produce is in season (and cheaper!) and put it aside for the leaner months.

While some of the methods listed below like freezing and dehydrating are fairly simple, canning and pickling safely does require more specialized knowledge and equipment. We recommend that someone on the F2S team get up-to-date training on how to can or preserve produce safely.

Freezing

Most vegetables and fruits can easily be frozen for later use. Berries are a great example. Blueberries, strawberries, blackberries, huckleberries, and salmonberries can all be frozen in single layers on cookie sheets and then stored longer term in freezer bags. They can then either be served frozen as a treat or allowed to thaw and then served on top of oatmeal, cereal, bannock or even as part of a salad bar.

To maintain the best quality and freshness in vegetables, it is recommended that they are washed and blanched before freezing. Blanching (immersing the produce in boiling water for a set period of time) destroys enzymes that can cause the flavour, colour, texture, and nutritive value of vegetables to deteriorate over time.

One of the best resources for blanching times is the book Bernardin Guide to Home Preserving.

Drying

If you have an oven available, you can dehydrate most produce items using the lowest setting. An actual food dehydrator could be a worthwhile investment in ensuring locally sourced produce can be enjoyed outside of the growing season.

Tasty dehydrated treats:

- Fruit: Dried apple rings, pear slices, and berries are excellent snacks. Drying fruit is one of the easier techniques for kids to participate in. They can help with the before and then see the "after" which can encourage more dried fruit eating in the F2S meals.
- Kale: Although unappealing to most children in its raw or cooked form, something magical happens when kale is dehydrated. It becomes crisp like a chip! Add a tiny bit of vegetable oil, some salt and some optional spices and you totally transform this vegetable.
- Tomatoes: You can mimic "sundried tomatoes" in your oven or dehydrator and then use them in soups or stews, pasta sauces, or chopped onto salads.

Fermenting/"Fresh" Pickles

It's quite an amazing process when you combine vegetables with a salt brine and allow them to ferment. The resulting product has a wonderfully sour flavour and is chock full of vitamins.

Sauerkraut and kimchee are two traditionally fermented products, both using cabbage as a base. Carrots, beans, and mustard greens can also be preserved using this method. Produce isn't cooked so once fermented, produce should be stored in the fridge for up to one year.

A great source of information is the book Wild Fermentation by Sandor Ellix Katz

Pickling

Although pickling requires extra steps to preserve food, if freezer space is unavailable or power outages are common in your area, having produce that is shelf-stable can be one less worry.

Pickles use vinegar as the ingredient to preserve the vegetables. Relishes and salsa will also fall under this category and can sometimes use lemon juice instead. A reliable recipe is essential, especially if you are using low-acid vegetables such as carrots, beets, beans, or tomatoes. Once all the ingredients are assembled in their jars, they still need to be hot water bathed to ensure shelf stability.

"Our ancestors pickled to preserve fruits, vegetables, meat, and fish. They pickled to save money. They pickled to avoid waste and make the most out of their foods. They pickled to ensure they had food for the long, dark winters." We do it today for some of the same reasons but also just for the enjoyment of preserving and eating foods grown locally.
Source: NY Food Museum, 2009

Hot Water Canning

When the water comes to a rolling boil, boy do we get cooking! Hot water canning is a safe way to preserve jams, jellies, pickles, & salsas so that the jars can be stored at room temperature. The following equipment is needed to hot water bath:

- A large cooking pot with tight fitting lid.
- A wire or wooden rack to prevent jars from touching each other.
- Canning jars – made from tempered glass, these jars can be re-used indefinitely.
- Two piece lids made up of a flat self-sealing disk & a screw-type metal band.
- Jar lifter

Although not essential, the following items sure make canning easier:

- Jar funnel: helps in pouring and packing of liquid and small food items into canning jars.
- Lid wand: magnetized wand for removing treated jar lids from hot water.
- Narrow, flat rubber spatula: for removing trapped air bubbles before sealing jars.
- Timer or clock: for accurate food processing time.

Pressure Canning

The only safe way to can salmon is in a pressure canner. In fact, all low acid foods like meat, poultry, and vegetables that haven't been acidified need to be pressure canned. Usually the rule is 100 minutes at 10 pounds pressure at sea level. For those who live 1000 - 2000 feet or more above sea level the pressure needs to be increased to 15 if you have a weighted gauge canner or 11 if you have a dial gauge canner.

The Produce Preservation Program Participant Guide **on the accompanying CD " Tools From the Shed"** provides more information on pressure canning.

chapter 15
RUNNING A GREEN(ER) PROGRAM

Running a greener program means being more thoughtful about the impact of the program on the environment. Green thinking can be extended to all aspect of the program – from the purchase of food and food equipment to the disposal of waste.

- Buying foods from local farms is a great example of green thinking. Buying local reduces the distance food travels from field to plate or "food miles", reducing C02 emissions.
- Buying foods direct from the farm means the produce is often shipped without excess wrapping, cutting down on garbage & waste.
- Purchasing organic food supports farmers who do not use pesticides, genetically modified organisms (GMOs) and synthetic fertilizers.

Environmentally Friendly Equipment Purchasing Decisions

Think green when purchasing equipment as equipment sets the stage for long lasting positive impact on the environment. A few equipment tips:

- Ensure that all appliances are energy efficient.
- Purchase an industrial dishwasher, and use re-useable dishes and cutlery.
- When an industrial dishwasher is not a feasible option (space, price, manpower limitations), purchase biodegradable plates and cutlery.
- Consider building a root cellar – this avoids electricity consumption for cold storage altogether!
- Before buying any other form of cold storage, investigate your options.
    - Are there root cellars in your community already?
    - Could you get a share in an existing root cellar?
    - Would your farmer be interested in a root cellar?
    - What are the long-term financial implications of a root cellar vs. electricity-based cold storage (e.g., purchase price, maintenance, electricity consumption, etc.)?
    - When you analyze life-cycle costs, you get a much better understanding of the true financial impact of your purchase.

Day to Day Green Decisions

Everyone can make decisions throughout the day that can help reduce our negative impact on the environment. Every effort, large or small, adds up day after day to make a big difference on how we influence our surroundings and the students you spend time with everyday.

Go Green:

- Properly ripen fruits and vegetables to ensure you get the most out of your produce.
- Do not to use paper plates, plastic cutlery, or any other disposable items. One time use items are huge contributors to waste and some of the hardest things to break down.
- Use reusable, sealable containers to store leftovers rather than saran wrap or tin foil.
- Use environmentally friendly cleaning products. Eco-friendly products tend to have fewer chemicals and are less harmful to the environment.
- Be aware of how much your students eat and how much is thrown into the waste bin. Constantly try to get to that point where your students are happily fed and you have no food to dispose of after. Look at this as a fun challenge.
- Compost whatever waste you do have!

Closing the Loop — Composting and Waste Recovery

Cradle-to-cradle is a simple concept and a key sustainability goal around waste. It simply means that instead of producing, using, and then disposing of products, we produce and use products that can be reentered back into the system and used again. There is no easier product for this than food.

In remote areas, compost is essential to the production of local food. In Bella Bella, there was little to no soil so loads of compost needed to be brought in just so a school garden could be planted. Composting all the kitchen scraps became critical to the success of the garden. Every little bit counted.

Food, especially local organic, is a natural green candidate. Throughout the day, there will inevitably be several pounds of food waste produced by your school and the program. Instead of throwing food away, set up a compost system in your school and turn it back into nutrient-rich soil. Connect your cradle-to-cradle food system to education and a local growing program to help educate your students and teach them skills to create and manage their own system at home. Before setting up a composting system, check with your school, school board and health protection/environmental health branch to find out if there are any regulations around composting at your school.

"Show your students that waste is a verb (something we do), not a noun (something that exists)", *-Janine DelaSalle, Food System Consultant, HB Lanarc.*

Raised Bed Fernie Ecogarden, Fernie BC

chapter 16
FROM GROW TO THROW —EDUCATIONAL IDEAS

While much of the activity around Farm to School happens outside of the classroom, this program supports a number of learning outcomes across grade levels and school subjects. From understanding about the sources of seeds, to calculating food miles and reading nutrition labels, teachers have a unique opportunity to put learning into action.

"I've just received one ton of seed potatoes from Edmonton Potato Growers. I ordered 8 varieties, so we have red, white, and yellow as well as early, mid, and late season types. I have challenged the community to buy these potatoes for $0.80 lb. and plant them to improve their family and community food security. So as we plant one ton of seed potatoes we are producing 4-10 tons or more of local food". *-Farmer, Farm to School Chetwynd Secondary School*

At the Farm

Educational activities and programs on farms are an important part of reconnecting children and youth with their food and the land, as well as building future generations of citizens that care about farms and farming. Farm visits provide a perfect opportunity for students to use all of their senses to learn: the more they can touch, smell, and taste the things they are learning about, the more deeply they will understand and remember what they learn.

Understandably, there are considerations when visiting a farm so that both the students and the farmer have an enjoyable time. Information on farm tours and a farmer's guide to hosting farm visits is located **on the accompanying CD " Tools From the Shed"**.

Activities on the farm could include harvesting, milking, weeding, digging, and turning compost. The accompanying CD " Tools From the Shed" provides a checklist of things that should be in place for both the farmer and teacher. Teachers should visit the farmer before the field trip to find out what the students will be learning.

Venue	Type of Activity	Questions to ask	Subject Areas
At the Farm	Visit to the pumpkin patch/corn maze	Where does food comes from? Can we make crafts with pumpkins &/or corn? What is the life cycle of these vegetables? Use a pumpkin to make a model of a globe.	Social Studies, Art, Science
At the Farm	Visit a tomato/cucumber greenhouse	Do these plants grow in soil? How does the farmer provide food, light & heat? Why is there a greenhouse? How do the plants get pollinated? How does the farmer control pests?	Chemistry, Biology, Science

In the Kitchen

Cooking skills are an essential life skill that few children get an opportunity to explore. When supervised closely, children as young as Grade 4 or 5 can wash, chop, and even stir ingredients over a stove. Having food safe protocol such as hand washing, knife skills, and proper attention to pot handles will ensure an enjoyable experience for all. The key is to have multiple volunteers so that adults supervise no more than 5-6.

Barb Finley of Project CHEF has students create a variety of dishes from Friendship Fruit Salad and Hodge Podge Porridge to Minestrone Soup and Veggie Tofu Stir Fry. Each group has access to a hot plate so that teams are not waiting to cook their meals. After a week of cooking, children learn how to read recipes, listen to instructions, work together as a team, chop, assemble ingredients, and sit down at a table and eat together.

Venue	Type of Activity	Questions to ask	Subject Areas
In the Kitchen	Make pumpkin stew or corn chowder	Follow recipes, understand fractions and measurements, listen to instructions. Is this a balance meal? How can we classify these vegetables? What is the equivalent metric measurement for 4 cups? What do you notice about how the ingredients are grouped in the ingredient list? What other ingredients could be used in this soup?	Math, Science, Language Arts
In the Kitchen	Pickling and Preservation	What happens to food when it spoils? How do we prevent that? What types of preserves do different cultures around the globe traditionally make?	Social Studies, Chemistry, Biology
In the Kitchen	Bake some bread	What ingredients go into bread? Where do they come from? What makes bread rise? Why do we have to knead bread? What kinds of breads are eaten around the world?	Science, Math, Social Studies, Chemistry

From one of the newest Farm to School schools-we are looking forward to growing future farmers - the foundations to our new greenhouse (bought with F2S funds) were poured this week thanks to donated time from the Village of Masset, deals from local cement provider and the hard work of our maintenance department. The students were given a chance to write their names in the wet cement". *-Lorrie Jorin*

In the Garden

Schoolyards provide fertile ground for learning. Establishing a garden, a greenhouse, fruit trees, honeybees or even edible flowers on school grounds adds depth and richness to a child's F2S experience. Kids get a lot of satisfaction out of planting, taking care of, and then eating their own food.

Some vegetables/fruits that grow well during the school year include: potatoes, lettuce, peas, radishes, strawberries, and carrots. If seasons are shorter, cold frames, a hoophouse, or greenhouse can provide excellent season extension. More information is **available on the accompanying CD " Tools From the Shed"**.

Venue	Type of Activity	Questions to ask	Subject Areas
At the Farm/in the Garden	Look at pollinators & honey.	How do bees help feed us? What other pollinators are important? How do bees turn nectar into honey? What is happening to the bee population?	Biology, Chemistry, Social Studies, Nutrition
At the Farm/in the Garden	Look at soils	How do soils help plants grow? Is the soil alive? What lives in the soil? Why is soil black? What give soil that smell? What is composting? How does it help our soil?	Science

School Year Gardens: A Toolkit for High Schools to Grow Food from September to June is an excellent local resource that can help your school become its own local food producer. It even has lessons plans to go along with it. **Find it on the accompanying CD " Tools From the Shed"**. Evergreen Foundation (see Resource list) has funding to support greening and food garden projects on school grounds.

In the Classroom

Venue	Type of Activity	Questions to ask	Subject Areas
In the classroom	Start seeds for your garden	How do seeds grow? How many tomatoes does one seed turn into? Where did these seeds originally come from? Can you draw a seed/seedling?	Science, Math, Social Studies, Art, Writing
In the classroom	Compare native & imported food plants	What foods do First Nations grow & harvest? How did non-native fruits & vegetables get here? Has our diet changed?	Social Studies, Science
In the classroom	Study the "100 Mile Diet"	Why is eating foods grown close to home important? What is a greenhouse gas? What kind of foods can we grow? What can't be grown here? Can we make a meal using only ingredients within 100 Miles?	Science, Social Studies, Reading, Writing

For more lesson plans, please **refer to the accompanying CD " Tools From the Shed"** for a list of dozens of websites and organizations that have already developed plans for primary, intermediate, and high school students.

A Fresh Crunch in School Lunch:

The BC Farm To School Guide

2nd Edition

BRITISH COLUMBIA | Healthy FamiliesBC