AGRICULTURAL PRODUCERS' TOOLKIT

Bringing the Farm to School

The Power of Farm to School

An Introduction to *Bringing the Farm to School Producer Training Program*

Welcome! Introductions. Agenda overview of the day

10:00 Welcome, Who is in the room ? The Power of Farm to School

11am Getting to Know School Food Services & Introduction to Selling to Districts
"The biggest restaurant in town." - Monica Pacheco

12-12:15 Problem Solving Challenge

12:15-1pm LUNCH

1:10 - 2pm Panel: The Honeymooners of Farm to School Procurement

STRETCH - Pop Quiz Gift card giveaway…

2:15 - 3:30 Selling to School Markets

3:30 Find your Specialist

4-6pm Happy Hour and Networking

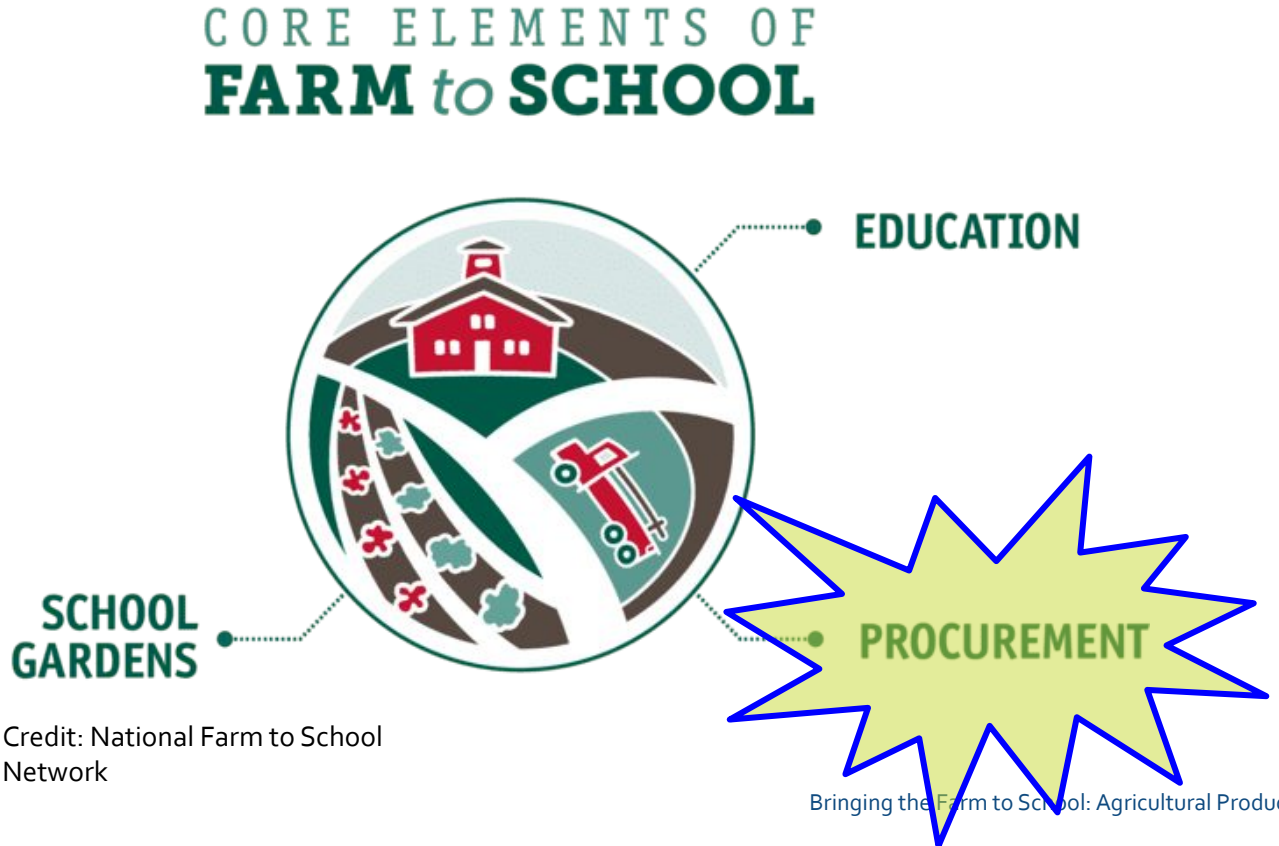
Who is in the Room?

- BINGO! 15 mins
- Win a Johnny's Seed Gift Card!

Learning Objectives

- What is farm to school. How it can benefit your business.
- Identify motivations for selling to schools and if/how your farm goals align.
- Briefly understand how public school food procurement works.
- Identity the steps to take to be ready to sell to schools.
- Be responsive and responsible!

What is Farm to School?



Credit: National Farm to School Network

Why Local Food in School Meals?

- Supports local farmers, businesses and local economies
- Increases school meal quality and overall program participation
- Increases kids' willingness to try new fruits and vegetables
- Supports school wellness policies and broader school board priorities
- Addresses equity and access to local more nutritious foods

How Schools Celebrate Local Food and Farmers

Credit:
FoodCorps

Credit: National Farm to School Network

Benefits of Farm to School for Producers

Benefits of Farm to School for Producers

Economic Development

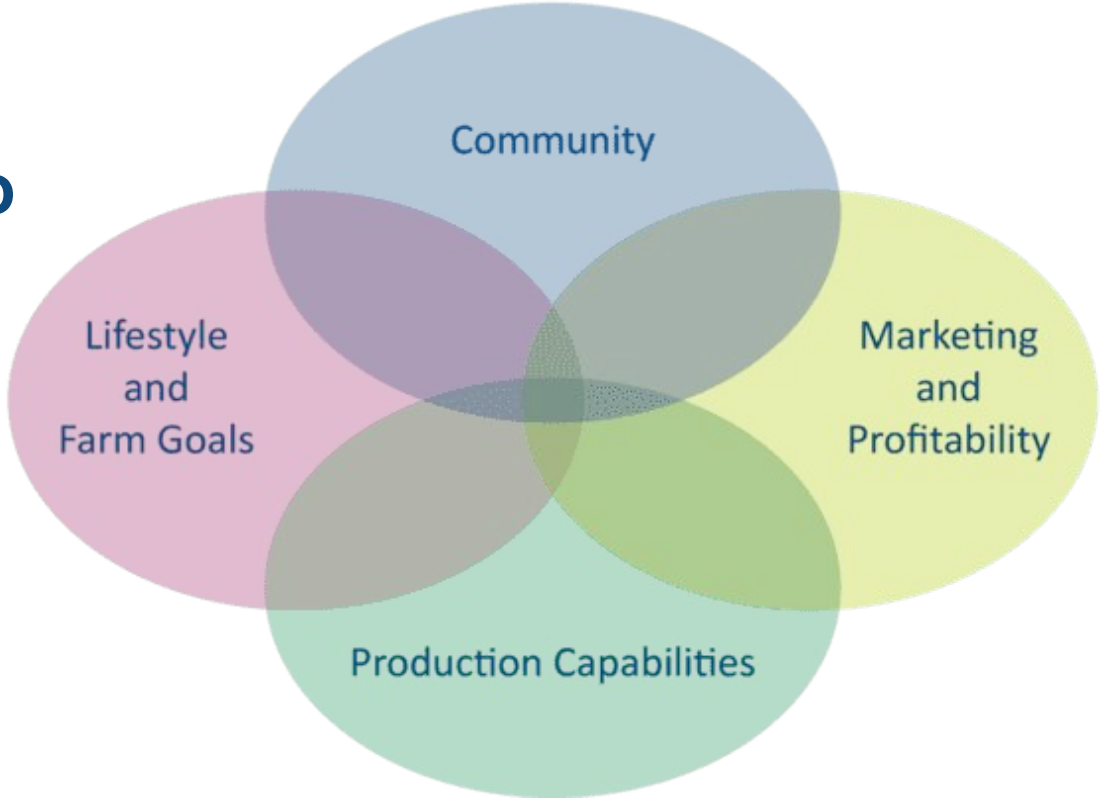
Public Health

Education

Environment

Community Engagement

How Can Farm to School Help You Meet Your Farm Goals???



Credit: Adapted from Oregon State University

Farm to School In Connecticut!

- School Food 4 All legislation
- Farm to School Legislation (in the works)
- Local Food for School Incentive Program
- CTG4CTK grant program
- Collab
- Farm to Early Care Funding and Organizing
- We have data!
    - USDA F2S Grant - Survey

WASHINGTON, Feb. 8, 2023 -- USDA-AMS awarding **Connecticut $1.8 million to increase their purchase of nutritious, local foods for school meal programs.**

How → 2 rounds: a base payment of $2,000; and a proportional amount of funding based on each district's share of statewide student enrollment.

Round 1, $2000+ :Sponsors will agree to only use the LFSIP funds for local food purchases with a priority on purchasing food from socially disadvantaged and small producers.

Round 2: Sponsors agree to reach out to local producers, targeting socially disadvantaged and small producers, to establish a longer-term relationship for the upcoming growing season(s) to incorporate local products in their school menus as a result. The goal of Round 2 participants is to establish a sustainable procurement relationship between the producer and NSLP sponsor.

Local Food Overview

- Most SFAs serving local for less than 10 years
- Heterogeneity in definition of local
  - 26% have no definition

	n	%
How Long Been Serving Local Foods	97	
Less than 3 years	19	19.59%
3-5 years	25	25.77%
6-10 years	29	29.90%
More than 10 years	24	24.74%
Best Describes Local Procurement	95	
I initiated procurement of local food	49	51.58%
SFA already procuring local food before I became director	46	48.42%
How Does SFA Define Local	98	
Produced within a 20 mile radius	7	7.14%
Produced within a 50 mile radius	8	8.16%
Produced within a 100 mile radius	7	7.14%
Produced within a 200 mile radius	6	6.12%
Produced within a 400 mile radius		
Produced within Connecticut	14	14.29%
Produced within the region	16	16.33%
Other	6	6.12%
We don't have a set definition for local	26	26.53%
I don't know	8	8.16%

Local Food Overview

- Nearly all purchase their local food in unprocessed form
  - Only 48% purchase local food that has been processed
- Local vegetables are included in both hot and raw menu items
- Only 20% freeze food to serve at other points in the year
- Local food available in K-12

In what form you purchase local food	95	
Whole/unprocessed	91	95.79%
Slightly processed	46	48.42%
Cooked	5	5.26%
I don't know	3	3.16%
Other	3	3.16%
Serve Local Vegetables	86	
Raw	6	6.98%
Hot	3	3.49%
Both	76	88.37%
Never Serve	1	1.16%
Freeze Local Food to Serve	96	
Yes	20	20.83%
No	76	79.17%

Grades Served Local	97	
Pre-K and younger	43	44.33%
K through 5th grade	84	86.60%
6th grade to 8th grade	87	89.69%
9th grade to 12th grade	78	80.41%
I don’t know	3	3.09%

Procuring from Producers

	n	%
If already procuring from producers, would you be interested in increasing this amount	25	
Yes	24	96.00%
No		
Don't Know	1	4.00%
If not procuring from producers, would you be interested in doing so	72	
Yes	45	62.50%
No	7	9.72%
Don't Know	20	27.78%

- Most SFAs would be interested in beginning or increasing procurement directly from producers
- Most common needs are delivery and information

For those interested in beginning/increasing procurement from producers:		
What challenges do you face in procuring directly from producers	83	
Identifying potential producers	48	57.83%
Procurement process	41	49.40%
Delivery	51	61.45%
Not enough SFA staff	26	31.33%
Other	13	15.66%
What would facilitate procuring directly from producers	84	
Receiving contact information of interested producers	50	59.52%
If producers could lightly process	28	33.33%
If they could deliver	64	76.19%
If we could enter into longer-term contracts	10	11.90%
Receiving availability/price lists each week	61	72.62%
Other	5	5.95%

MARKET SUITABILITY INDEX

Minimum Expectations & Considerations for Entry into Various Market Channels[1]

MARKET CHANNEL CONSIDERATION	FARMERS MARKET		FARM STAND		CSA		SMALLER FOOD HUB ($1–5 MILLION IN SALES)		RESTAURANT OR INSTITUTION		LARGER GROCERY		LOCAL/REGIONAL PROCESSOR		DISTRIBUTOR & LARGE FOOD HUB	
FARM CHARACTERISTICS																
Farmer Experience	Low	1	Low	1	Medium to High	4	Medium	3	Medium	3	High	5	Medium	3	High	5
Production Capacity	Low	1	Low to Medium	2	Low to High	3	Medium to High	4	Low to Medium	2	Medium	3	High	5	High	5
Mechanization/Systematization	Low	1	Low	1	Medium	3	Medium	3	Medium	3	Medium	3	High	5	High	5
Access to Land	Low to Medium	2	Low to Medium	2	Medium	3	Low to Medium	2	Medium	3	Medium to High	4	High	5	High	5
MARKETING/ADVERTISING																
Farm/Brand Visibility	High	1	High	1	High	1	Medium to High	2	Low to Medium	4	Low to Medium	4	Low	5	Low	5
Face-to-Face Interaction & Presence	High	1	Medium to High	2	High	1	Low	5	Medium	3	Low	5	Low	5	Low	5
Persistent Follow-Up Needed	Low	1	Low	1	Low to Medium	2	Medium	3	Medium to High	4	Medium	3	Low to Medium	2	Medium	3
PRODUCT CHARACTERISTICS																
Product Diversity	High	1	High	1	High	1	Low to Medium	4	Low to Medium	4	Low to Medium	4	Low	5	Low	5
Food Safety Requirements	Medium	3	Medium	3	Medium	3	High	5	Medium to High	4	Medium to High	4	High	5	High	5
Product Consistency Needed	Medium	3	Medium	3	Low to Medium	2	Medium to High	4	Medium to High	4	High	5	Medium	3	High	5
PRICING																
Setting Product Prices	High	1	High	1	Medium	3	Medium to High	2	Low to High	3	Low to Medium	4	Low	5	Low	5
Price Point	High	1	High	1	Medium	3	Medium	3	Medium	3	Medium	3	Low	5	Low to Medium	4
FARM LOCATION																
Access to 100,000+ Population	Very Important	1	Very Important	1	Very Important	1	Not Important	5	More Important	2	Less Important	3	Not Important	5	Not Important	5
LABOR																
Sales Labor Needs	High	1	Medium	3	Low to Medium	4	Low	5	Low	5	Low	5	Low	5	Low	5
TOTALS		11		13		17		28		25		28		33		34

1 Detailed discussion of these various market channels (farmers market, CSA, restaurants, retail, etc.) are also found in *Pathways to $100K in Farm Sales*, also published as part of this series.

Portions borrowed or adapted from *Guide to Marketing Channel Selection* (2010), Cornell Cooperative Extension, p. 34.

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Monica Pacheco, CT State Dept. of Education
Christine Wallace, Schools Consultant

Getting to Know School Markets

Module 1

Learning Objectives

- **Gain a basic understanding of Child Nutrition Programs** (CNPs) so that you can assess the viability of school markets for your business.
- **Gain a basic understanding how CNPs plan menus, process foods, and prepare meals** so that you can consider how your products meet the needs of school markets.
- **Understand the basic regulations governing school food procurement** and how this impacts CNP practices for sourcing and purchasing local foods.

Child Nutrition Programs

School Meals – More Appetizing Than You Remember

Photo: USDA

Photo: National Farm to School Network

Child Nutrition Programs – School Meal Programs

"School Meal Programs"

- National School Lunch Program (NSLP)
- Fresh Fruit and Vegetable Program (FFVP)
- School Breakfast Program (SBP)

Photo: USDA

Child Nutrition Programs – Additional Child Nutrition Programs

Additional Child Nutrition Programs

- Child and Adult Care Food Program/At Risk After School (CACFP)
- Summer Food Service Program (SFSP)

Photo: USDA

School Meal Programs in CT by the Numbers

National School Lunch Program (2019)

- Nearly 1,000 schools participate
- 261,000 students served each day
- $109 million in federal spending each year

Fresh Fruit and Vegetable Program (2019)

- $2.4 million in federal spending

Local Producers can partner with schools to access these federal dollars!
2019 Farm to School Census
86% of respondents in CT use local foods

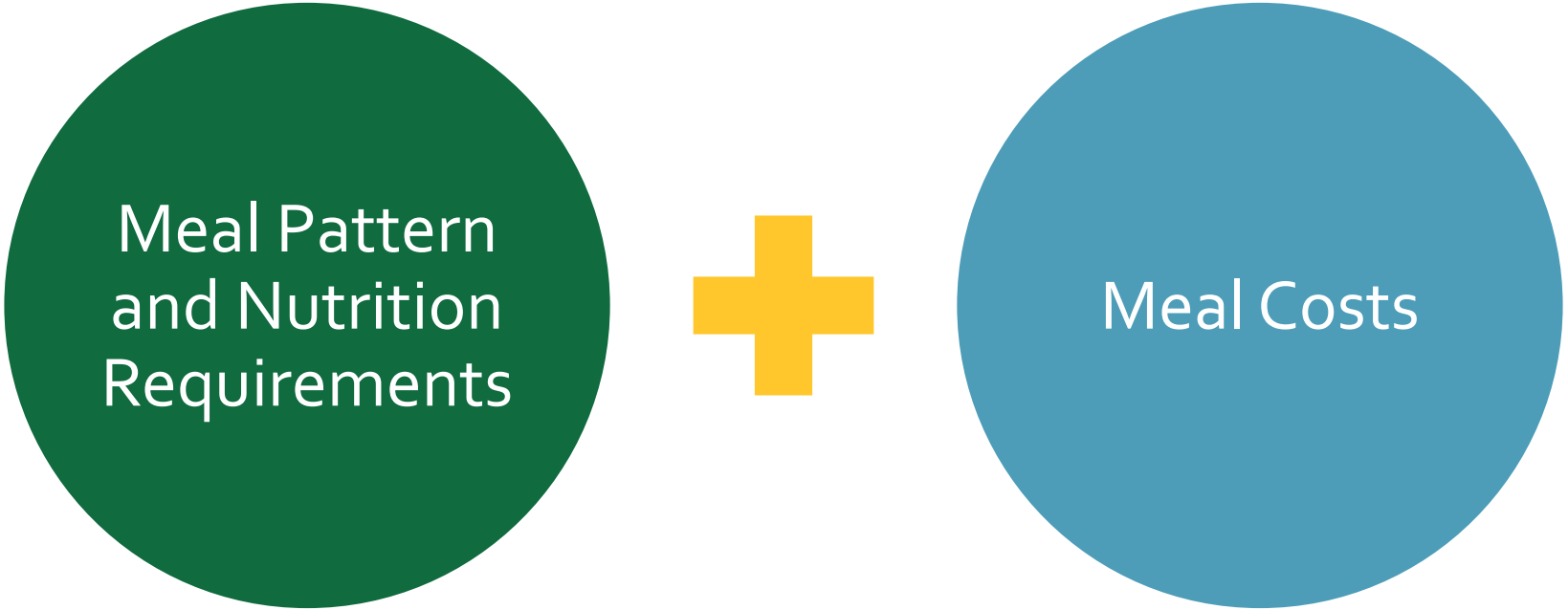
Key Players – Federal to Local

United States Department of Agriculture Food and Nutrition Service (USDA FNS)

State Agency (Education, Health, or Agriculture)

School Food Authority (School District)

What Influences School Meal Program Purchasing?



A Look at School Meals

Meal Components: milk, grain, protein (meat or meat alternative), fruit, and vegetable

- National School Lunch Program
  —5 Components
- School Breakfast Program
  —3 Components
- Fresh Fruit and Vegetable Program
  —Fruit/Vegetable

Photos: USDA

School Meal Program Meal Components

Meal Component Requirements:

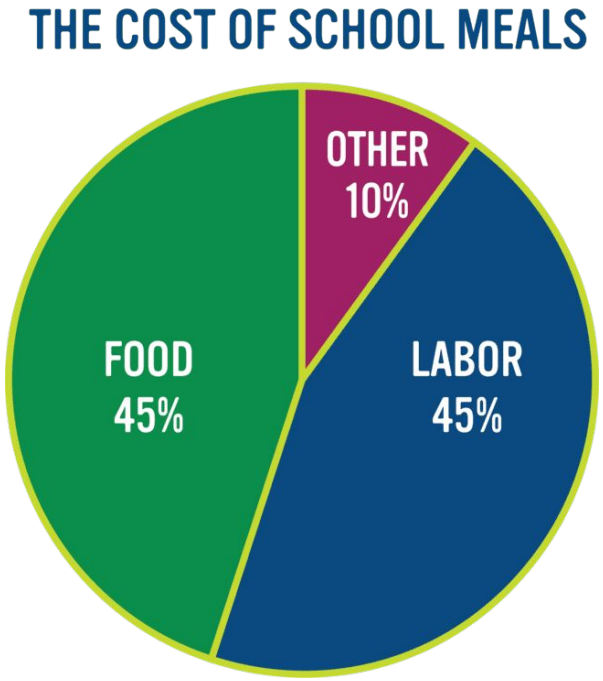
- Milk: Fat-free or low fat
- Grains: Whole grain-rich
- Fruit: Limit juice
- **Vegetable: Subgroup requirements**
  - **—Dark Green**
  - **—Red/orange**
  - **—Beans and peas**
  - **—Starchy**
  - **—Other**
- Meat/Meat Alternatives

Key leverage points:

- Color and variety
- Overcoming seasonal barriers
- Other nutrition standards

The Cost of School Meals

- The average cost to produce a school lunch is $3.81.
- The average cost to produce a school breakfast is $2.72.
- The breakdown of that cost is: 45% for food, 45% for labor, and the remaining 10% for all other costs (supplies, contract services, etc.)
- That equals $1.71 spent on food for a school lunch and $1.22 spent on food for a school breakfast.



Small numbers add up: 28.9 million meals each day x $1.71 per meal

= **$49.4 million!**

Program Reimbursement Rates

- National School Lunch Program
  - $0.32 - $3.65
- School Breakfast Program
  - $0.31 - $2.20
  - **CURRENT RATES**
  - NSLP: $.77 - $4.33
  - SBP: $.50 - $2.26

Photo: USDA

The Diversity of School Meal Programs

Product Need: One Size Does Not Fit All

CNP Setting	Serving Size	Number of Meals	Pounds Needed
Large K-12 District – Plated Lunch	¾ Cup	350,000	108,150
Medium K-12 District –Plated Lunch	¾ Cup	5,000	1,545
Small K-12 District – Fresh Fruit and Vegetable Snack	½ Cup	500	102
Medium K-12 District –Salad Bar	Variable	Variable	50

Local Food Sourcing and Procurement in School Meals

THE FARM TO SCHOOL SUPPLY CHAIN

How Schools Source Local Foods

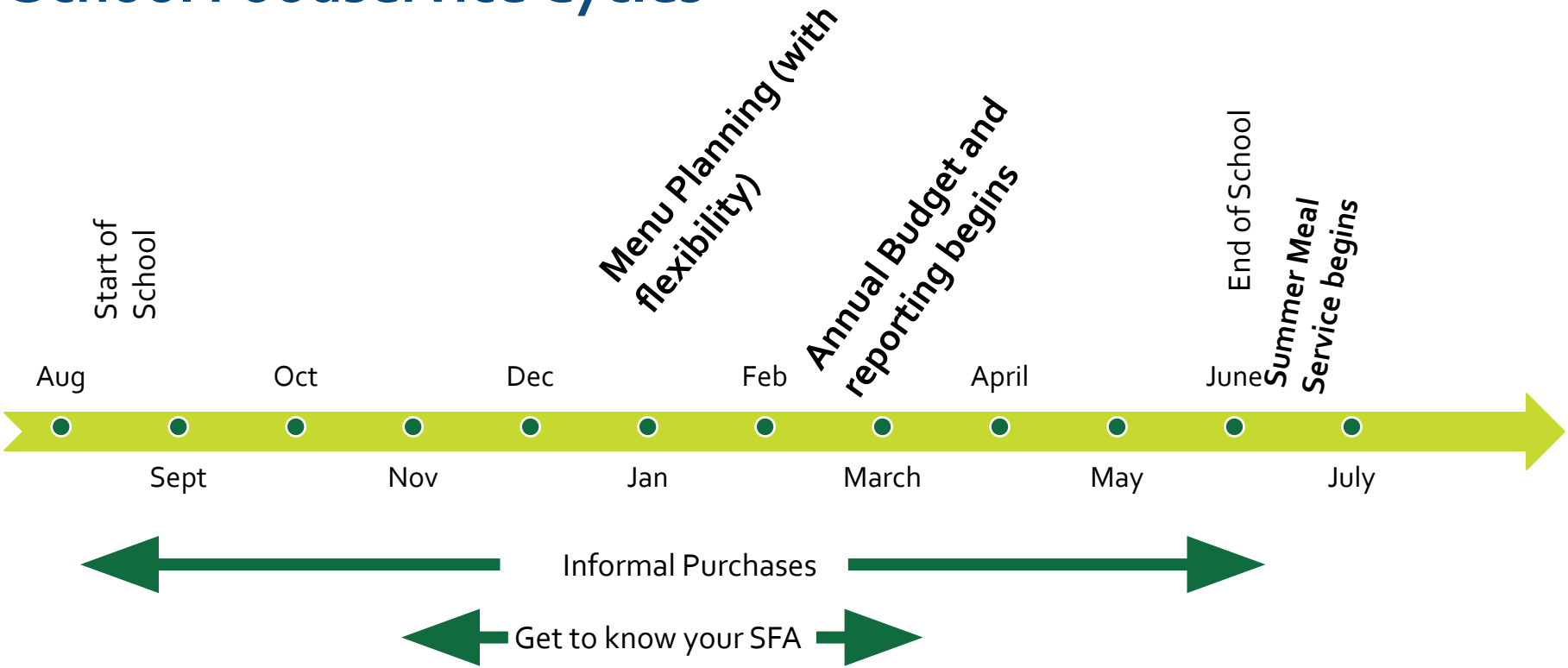
- Direct from producers
- Distributors
- Food service management companies
- Local retailers
- Processors
- Food hubs and aggregators
- Gardens
- USDA Foods

Photos: USDA

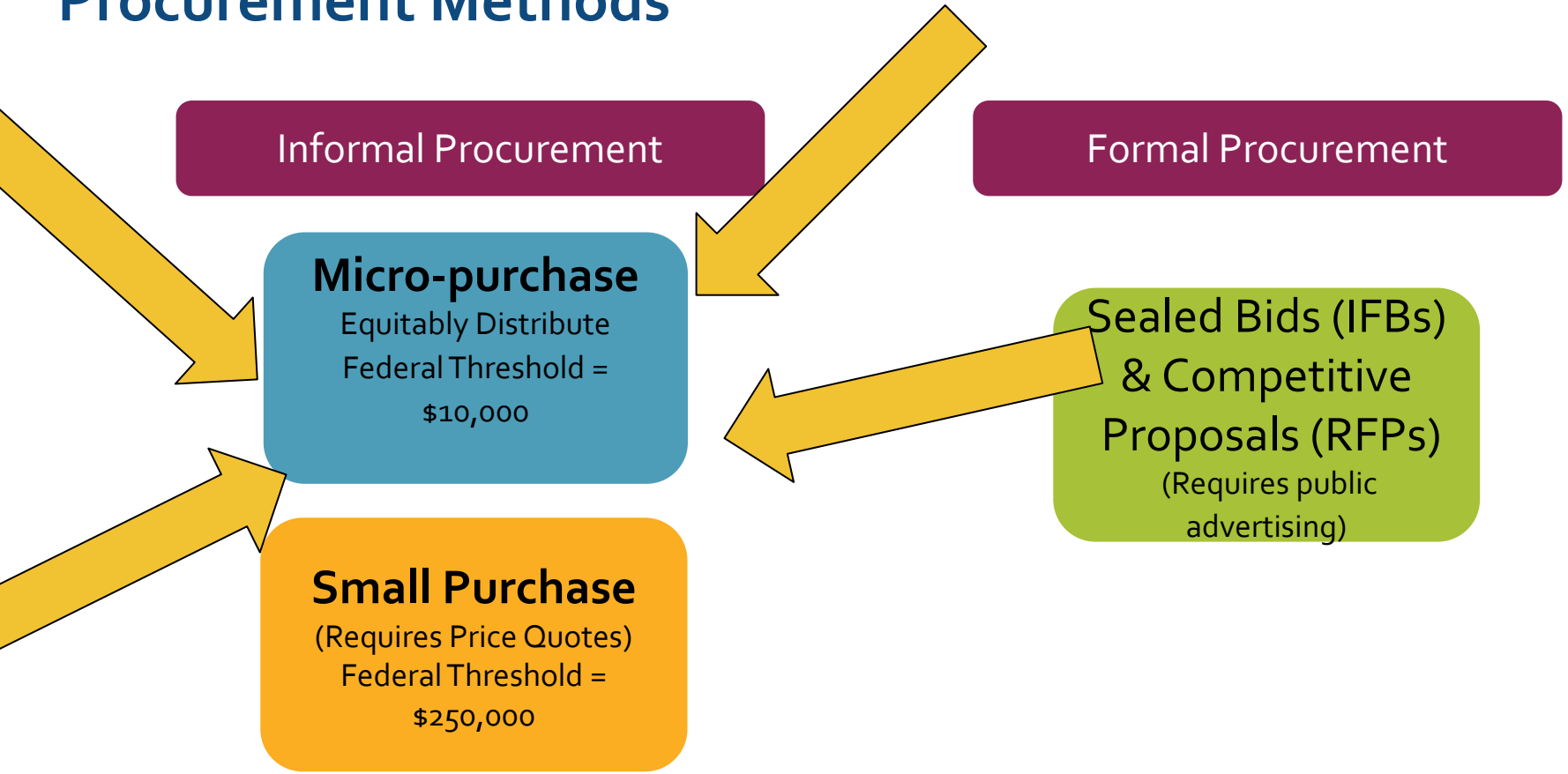
How Schools Incorporate Local Products

- Meals – Including breakfast, lunch, and dinner
- Harvest of the Month (HoM) & "State plates"
- Snacks
- Tasting and educational activities
- Special events

School Foodservice Cycles



Procurement Methods



Conclusion and Action Planning

Applied Activity – School Food 101

Schools might be particularly interested in the sweet potatoes I grow because they are required to serve red/orange vegetables.

True: Schools are required to serve a certain amount of red/orange vegetables each week. Sweet potatoes, peppers, carrots, winter squash, and more can help them fulfill this requirement.

Applied Activity – School Food 101

Different School Food Authorities and different Child Nutrition Programs require different volumes of product.

True: The size and type of program, age of children served, mode of serving (e.g., plated vs. salad bar) all influence the volume of product needed. This variation means it is possible to find a program that fits your production size and scale.

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Selling to School Markets

Module 2

Learning Objectives

- **Understand how to approach and communicate with school buyers** for direct purchasing.
- **Understand how to meet the vendor requirements** of school markets.
- **Understand how to meet the product-quality standards** of school markets.

Section A:
Farm To School Market Channels

Overview of Farm to School Market Channels

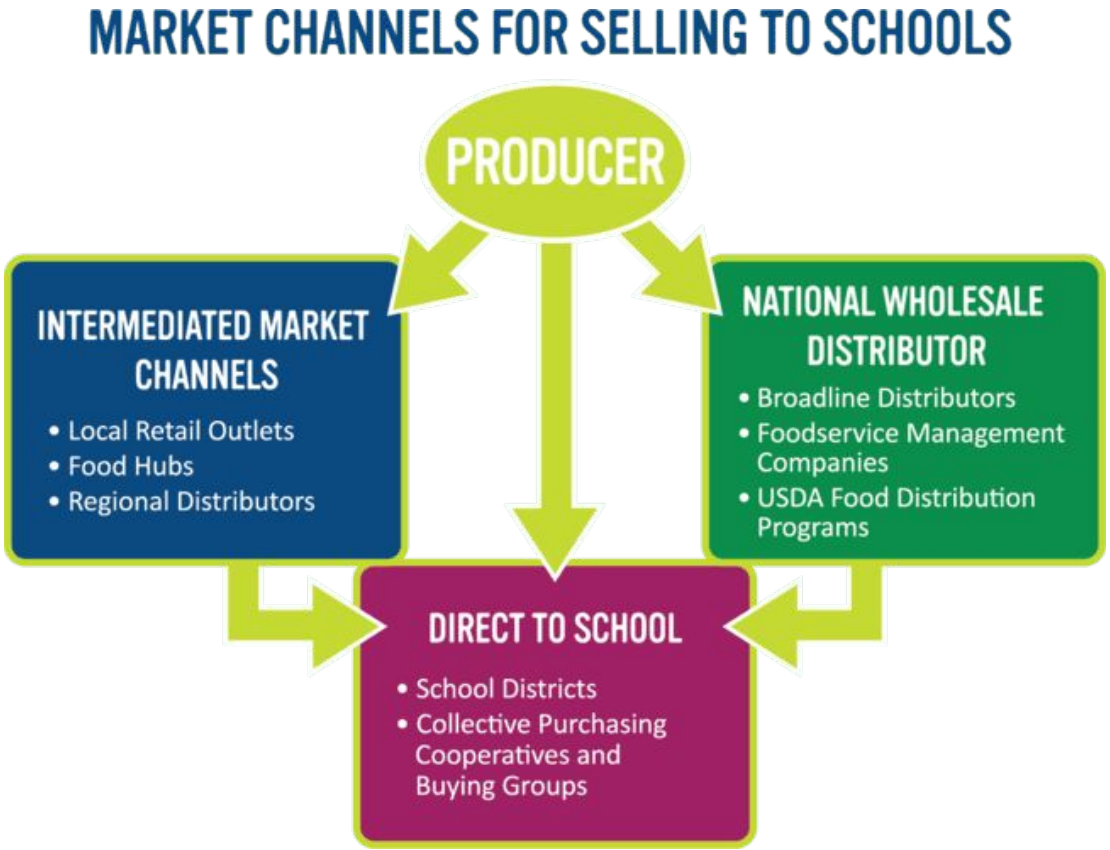
There are **2 primary supply chain models** for getting your food into school markets:

- Direct-to-school
- Intermediated

According to the USDA Farm to School Census,

- 63% of school districts that participate in farm to school use intermediaries, such as distributors
- 40% of schools report they get local food through a farmer directly

How Does Your Product Get to the School?



Direct-to-School Supply Chains

Direct-to-school supply chains are what many people think of first when they hear farm to school…

Photo:
Unsplash

Photo:
USDA

a relationship directly between a local producer and the school.

Direct-to-School: Potential Benefits

- High levels of customer satisfaction
- Allows you to retain and grow your brand & business
- Potential market for lower grade products
- Direct lines of communication
- Local decision-making processes

Photo:
USDA

Direct-to-School: Potential Drawbacks

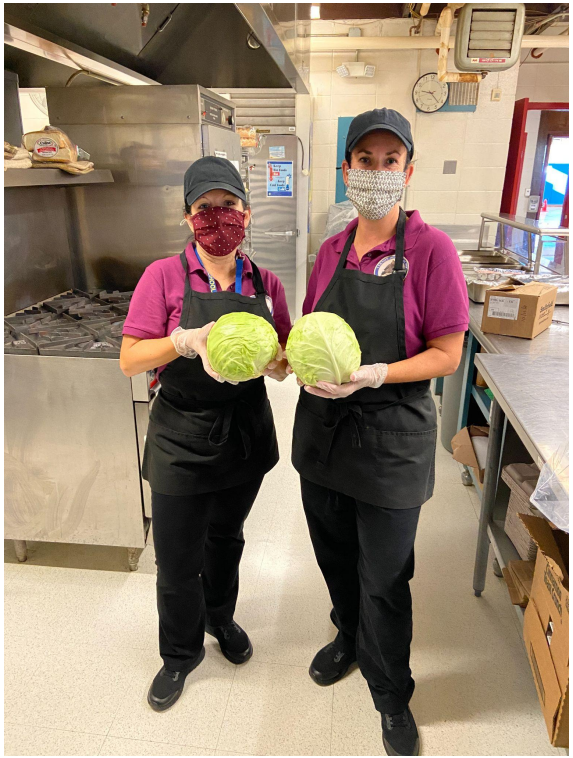
Photo:
USDA

- Increased time spent marketing products
- Determining a fair price can be complex
- Minimum food safety standards
- Required documentation and recordkeeping
- Payment processes
- Vendor establishment

Section B: Selling To School Districts

Identifying Volume of the Product Based on School's Needs

- Work with the school buyer to determine number of servings of a product and how that translates into pounds.
- Are there options for smaller volumes?
  - Taste test focus on one school, menu extra?



Rethinking Volume Requirements

Red/Orange Vegetables - CARROTS					
Carrots, fresh *Without tops*	Pound	10.30	1/4 cup raw vegetable strips (about 3 strips, 4 inch by 1/2 inch)	9.80	1 lb AP = 0.70 lb ready-to-cook, or serve raw carrot sticks
	Pound	10.60	1/4 cup raw, chopped vegetable	9.50	1 lb AP = 0.83 lb trimmed, peeled carrots
	Pound	15.40	1/4 cup raw, shredded vegetable	6.50	1 lb AP = 0.83 lb (about 3-3/4 cups) trimmed, peeled, shredded carrot
	Pound	8.10	1/4 cup raw, shredded vegetable with dressing	12.40	1 lb AP = 0.83 lb (about 3-3/4 cups) trimmed, peeled, shredded carrot
	Pound	8.63	1/4 cup cooked, drained, shredded vegetable	11.60	1 lb AP = 0.79 lb (about 2-1/8 cups) trimmed, peeled, shredded, cooked carrot; 1 lb AP = 0.83 lb (about 3-3/4 cups) trimmed, peeled, shredded carrot
	Pound	10.90	1/4 cup raw, sliced vegetable (5/16 inch slices)	9.20	1 lb AP = 0.83 lb (about 2-2/3 cups) trimmed, peeled, sliced carrots
	Pound	8.16	1/4 cup cooked, drained, sliced vegetable (5/16 inch slices)	12.30	1 lb AP = 0.76 lb (about 2 cups) cooked, sliced carrots; 1 lb AP = 0.83 lb (about 2-2/3 cups) trimmed, peeled, sliced carrots

Credit: USDA FNS Food Buying Guide

Carrot sticks :

- 9.8, or ~ 10 pounds, of carrots = 100 servings.

What schools Generally require…?

- Insurance – What types/levels of Insurance - how does that work
- Registering as a vendor with a district? Some districts might require this , also based on levels of purchasing. What do schools require…?
- Food Safety literacy at least - this will be covered more later…
- ***Rock bottom prices***
- Responsive and responsible communication

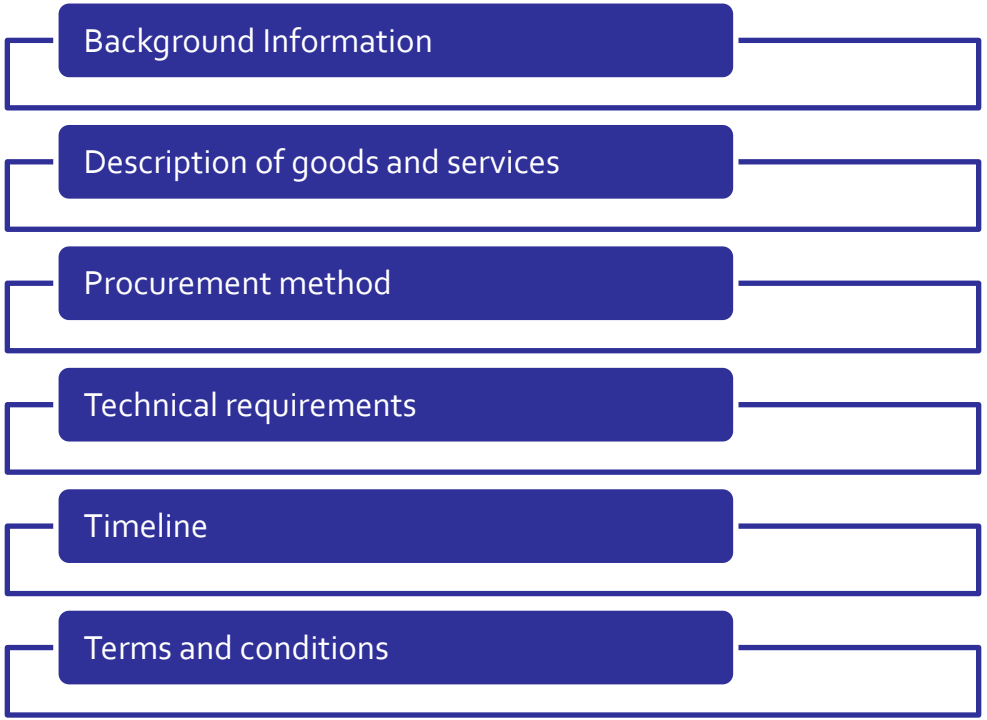
What Don't necessarily schools require…?

- Complex Bids and Contracts
- Food Safety Certifications - covered later
- Large volumes
- Frequent deliveries

"What's in a School Solicitation?"

Solicitations are how school districts communicate…

- what products they're looking for….
- when they need them…
- how much they need…
- and any requirements they have for potential vendors.



Understanding What Motivates a School Nutrition Director

You should make an opportunity to meet with the school food service director for the district to learn about their specific needs and requirements.

Here are some key points to discuss together:

- Program Goals
- Product Needs
- Sourcing Practices and Preferences
- Solicitations and Procurement
- Payment
- Contingencies

Do not assume that all schools will have the same motivations and requirements!

Approaching School Nutrition Directors

It is important to be patient when approaching with school food service directors, working directly with farmers may be as new to them as working with schools is to you!

Here are a few things you can do to help jumpstart relationship building and build trust:

- Avoid judgment and don't shame school food
- Be prepared for your conversation
- Never show up unannounced
- Share your expertise (and passion!)
- Communication is key
- Remember, developing trusted relationships takes time

- ***CHECK YOUR PACKETS FOR A CONVERSATION GUIDE!***

Pair up for a prize winning activity!

- ★ What specific crop(s) do you grow to meet the meal pattern?
- ★ How many Pounds would you need to sell to serve 300 lunches?
- ★ What is your **best lowest** price?
- ★ What category is your product? (remeber those color categories)
- ★ What is your serving suggestion(s) to the FSD?


Lunch!
We will meet back up in the large room across from here...

Panel...

Becky Tyrell, EdAdvance &
Reneè Giroux, NW CT Food Hub

Elizabeth Fisher, Vernon & Susan Mitchell
Cloverleigh Farm

Ernie Koschmeider,
Groton

Emmanuel Marte,
Micro2Life

John Turenne,
Branford

Panel...

1st - Describe how you met? what was your first date like? Who reached out to who? what was awkward? where was there chemistry?

2nd - Which were the '*easiest*' Barriers or Limitations to overcome once you started making this connection. What have you not figured out yet...?

3rd - How is farm to school worth it for your farm business? How do school sales help you meet your Farm Goals? How does buying CT Grown help you meet your school food service goals?

Q & a...

AGRICULTURAL PRODUCERS' TOOLKIT

Bringing the Farm to School

Choosing the Right Product to Sell to Schools

Module 3

Considerations for Setting Up Your Farm to School Plan

- ★ What product(s) fit your farm and the School/Business plan
- ★ Crop planning for specific products for schools
- ★ Food Safety Considerations
- ★ Price point
- ★ Delivery → packaging, labeling and Food Safety
- ★ Quality and consistency of product
- ★ Insurance
- ★ Website/marketing

Learning Objectives

- **Understand how your products can fit** into school meal menus.
- **Identify products and quantities that fit best**, based on the needs and capacity of school buyers.
- **Identify how your products can be adapted** to meet the needs of school buyers.
- **Explore how product pricing and production costs can help determine the best product** for school markets.
- **Determining some basics** of what you need to work with schools

Section A: Choosing the Right Product – School Considerations

Choosing the Right Product

Photo: Fayetteville Public School Seed to Student

- What's the capacity of the district to cook food from scratch?
- Which of your current products does the district buy? Could there be a substitute in the menu? (remember those color categories)
- Can you meet the volume based on how the product will be served?
- Does a product have special considerations for food safety or storage?

CT Grown

Do you purchase Connecticut-grown versions of any of these products	92	
Apples	83	90.22%
Berries	36	39.13%
Sweet Corn	42	45.65%
Snap/Green Beans	41	44.57%
Summer Squash	57	61.96%
Winter Squash	37	40.22%
Root Vegetables	23	25.00%
Lettuce	49	53.26%
Carrots	43	46.74%
Fresh Herbs	20	21.74%
I don't know	6	6.52%

Would you be interested in serving CT grown versions of these products	82	
Apples	9	10.98%
Berries	38	46.34%
Sweet Corn	31	37.80%
Snap/Green Beans	33	40.24%
Summer Squash	17	20.73%
Winter Squash	22	26.83%
Root Vegetables	22	26.83%
Lettuce	33	40.24%
Carrots	31	37.80%
Fresh Herbs	33	40.24%
I don't know	10	12.20%

- Products SFAs are interested in purchasing seem to be those that don't require processing

What to Grow?

- Do you have a product in mind?
  - —Consider the school menu
  - —Consider capacity and infrastructure for cooking products
  - —Communicate with your buyer about their needs

- How will you sell to schools?
  - —Direct to a school
  - —Through a distributor

School Cooking Infrastructure

Infrastructure will influence what products a school can use and/or store:

- Full Service Central Kitchen
- Heat and serve
- Scratch or speed-scratch cooking
- Salad Bars

Photo: Fayetteville Public School Seed to Student

Opportunities to get started…

- Micro purchases
- Special meals/events
  - —Harvest of the Month
  - —National Farm to School Month activities
  - —Taste tests
  - —Classroom lessons

Adding Value Without Processing

- Fresh, superior products
- Farm and school visits
- Farmer Visits

What else can you think of…?

Farm to School: Not a High Profit Margin

"Farm to school is not a high-profit-margin sale; it's a high-volume, reliable sale to complement other higher-profit margin, smaller volume sales."

—Andrea Alma, OCFS Mountain Plains Regional Lead

- Work with school to determine which products are a good fit for farm to school
- High volumes, seconds, or product varieties that have lower costs of production could be creative approaches to finding the right product for the school market and still allowing for a small profit.

Know your costs of production

Determining Pricing

From the Micro-purchase perspective…

- Ask Questions! Relationship, conversation, compromise
- Refer to other wholesale-market channel pricing to understand prices.
- Price point is dependent on **YOUR** costs of production AND be ready to understand the buyer's price constraints and perspective.
- Not all products will be a fit for farm to school

(purchasing lower volumes of local may allow FSDs to integrate some local product at first…)

Applied Activity – School Food 101

There is no way that schools can afford to purchase my products with their spending limitations.

False: Although the reimbursement rates for school meals may be limited, school food authorities have flexibility to spend more on some local foods while balancing their budget using less-expensive products in other places.

AGRICULTURAL PRODUCERS' TOOLKIT

Bringing the Farm to School

Growing for Schools

Module 4

Learning Objectives

- **Assess your capacity** for selling to schools.

- **Understand the infrastructure, planning, and food safety requirements** that are needed to move product into a school market.

- **Develop your own next steps** for planning to move your product from field to schools.

Meeting the Budget Needs of Schools -
Being responsive and Responsible…

- Volume
  - —Consistent quality and quantity
- Billing
  - —Invoicing and delayed payment
  - —Reliable payments
- Price
  - —Meet farm needs while charging what the school can afford

Photo: National Farm to School Network

Meeting Common School Vendor Requirements (regardless of the market channel…)

Common requirements for potential vendors seeking to sell to school markets include:

- Post-Harvest Handling Practices
- Food Safety Practices
- Insurance and Licenses
- Distribution Logistics

Enterprise Budgets - Determine Break-even

- Know your costs
- Schools may have options to lower your costs

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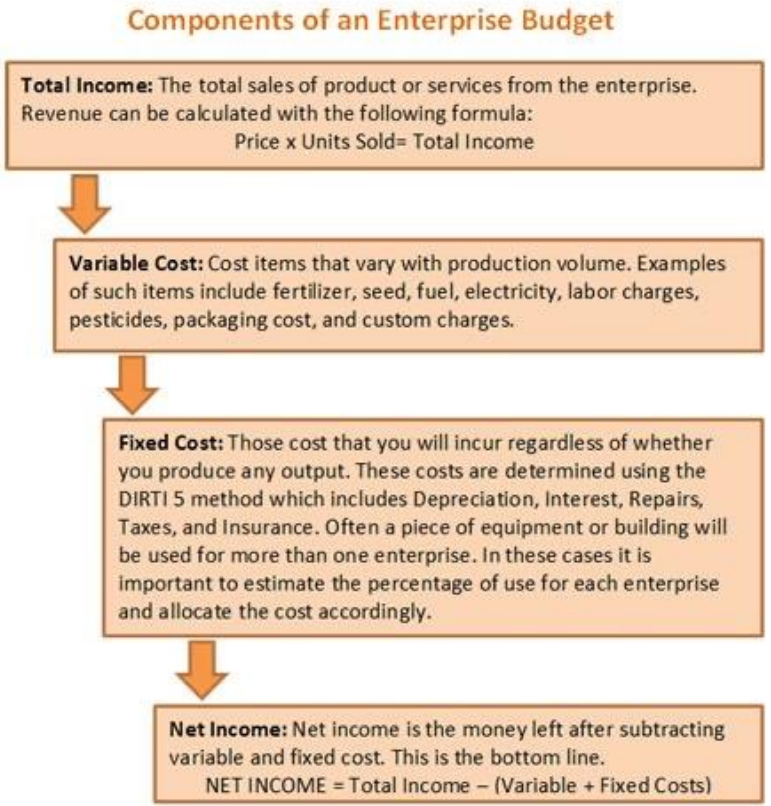
Click for Enterprise Budgets



Credit: University of MD Extension Program

Section B: Scaling Up Production – Meeting Increased Demand for School Markets

Scaling Up & Infrastructure Investments

Photo: University of Vermont

Photo: National Center for Appropriate Technology

Photo: VT Agency of Agriculture

Sustainable Growth

- Return on Investment
- Break Even Cost
- Tools
- Equipment
- Buildings
- Hoophouses
- Loans and Debt

Photos: National Center for Appropriate Technology

Selling to Schools – Special Considerations

Capacity, Consistency, Infrastructure

- School Food Service Directors' requirements
- Food safety and production standards
- Washing, packing, or processing facility capacity
- Cooler and delivery truck space
- Accounting system to track sales and payments
- Delivery thresholds - how far for how much?
- Packaging & Labeling Requirements (tracking)
- Marketing capabilities and web presence

Liability Insurance

Ask your district to make sure you have what they require!
Here's just a few of the available companies in CT!

Grande INSURANCE AGENCY

LymanInsure™

Farming Insurance with the Byrnes Agency

Section C: Crop Production and Planning

Crop Planning: Making room in your plan for school sales

What do you grow well? What do you LIKE to grow? What is well suited to the infrastructure you have?

- Risk assessment of growing without a contract or 'on a handshake'

- Scaling up products that make sense for you AND that meet school demand.

- Skillful at assessing harvest window and crop succession

Crop Planning - Time to Make a Plan

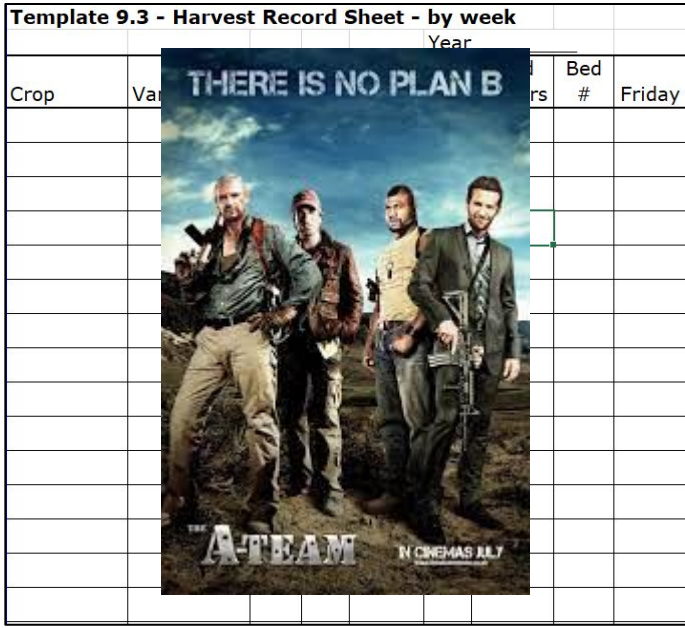
Urban Ag. Crop Planning Manuel, Wisconsin Ext.

https://urbanagriculture.horticulture.wisc.edu/crop-planning/

Johnnys Seeds planning Tools & Calculators

https://www.johnnyseeds.com/growers-library/online-tools-calculators.html

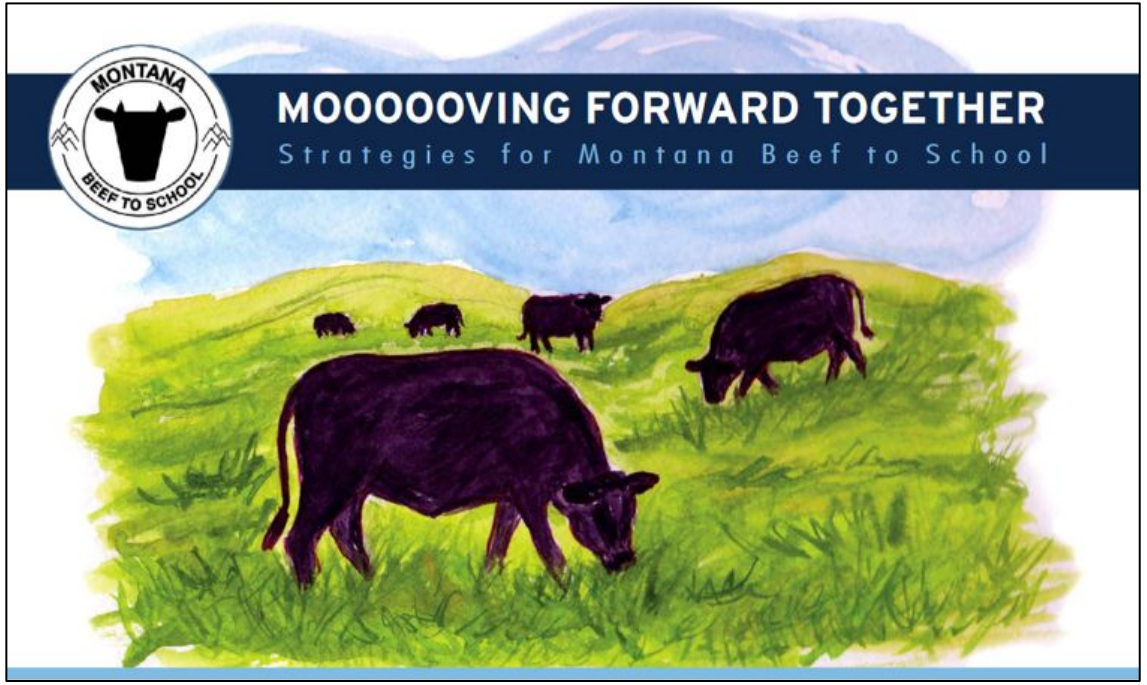
New Entry Sustainable Farming Project - Crop Planning Module, https://nesfp.nutrition.tufts.edu/resources/crop-planning-module



Section D: Animal Protein Production Planning

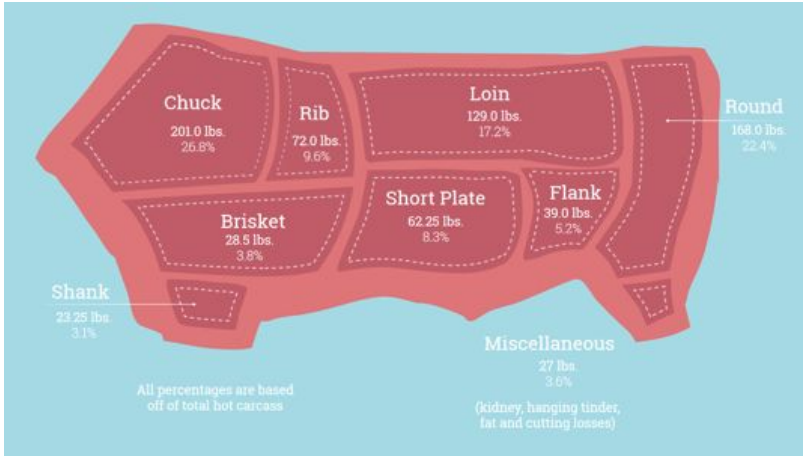
How Do Your Products Fit with School Demands?

- Proteins are the most expensive part of a school lunch meal
- Consider:
  - —Cost
  - —Versatility



Assess Current Production

- What is your production potential, in pounds and specific cuts?
- What is your break-even price?
- Do you have the acreage and grazing/feeding management skills to produce at the scale needed and sell your products above break-even cost?



Graphic: University of Tennessee Institute of Agriculture

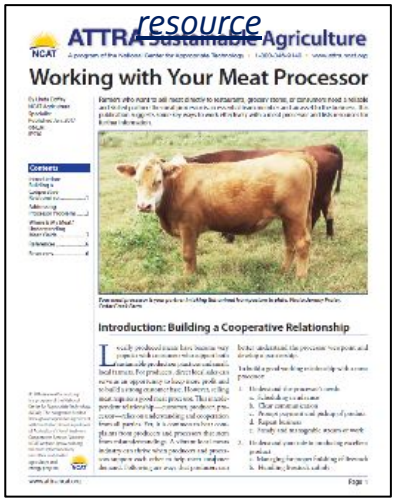
Photo: NCSU Growing Small Farms

Meat – School Sales and Food Safety Regulations

Agencies responsible for establishing the rules and regulations

- USDA Food Safety and Inspection Service(FSIS)
- Department of Health and Human Services (DHHS)
- Food and Drug Administration (FDA)
- USDA Food and Nutrition Service (FNS)
- State and local governments adopt Federal regulations and issue permits

Click link for resource



Section F: Navigating School Food Safety Standards

Indu Upadhyaya, UConn Extension Educator

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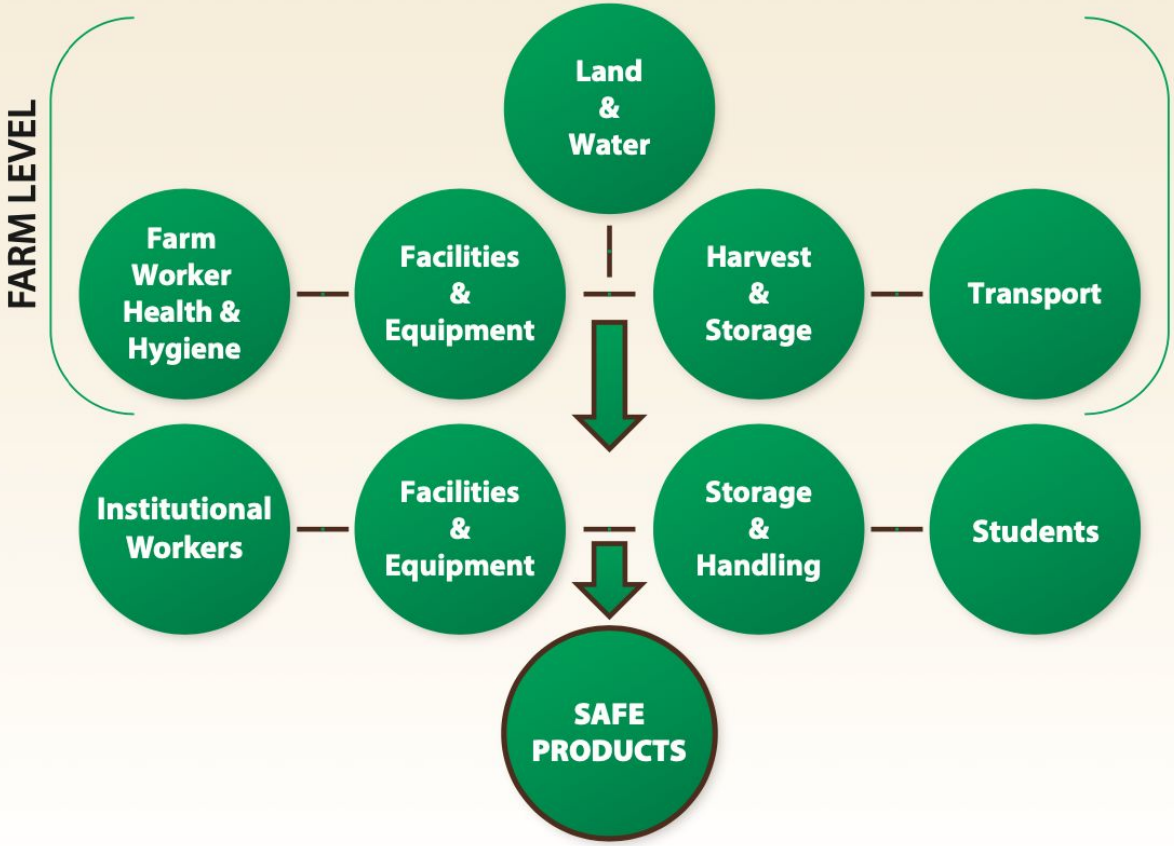
Farm to School Food Safety

- The USDA Food and Nutrition Service does not mandate food safety requirements.
- Requirements for food safety differ from state to state and School Food Authority.
- This information is often included in the vendor requirements section of a solicitation but can present as a specification, as well.

Figure 1. Model of food safety from the farm to the school cafeteria.



CT –Farm to School regulation??

- 2019 H.B. 5379 Concerning the Use of Locally Grown Food in School Food Programs H.B. 5379 encourages local and regional school boards to procure locally grown foods for their school food programs.
- The Connecticut Department of Agriculture works with state agencies such as the Connecticut Department of Education to implement Connecticut's Farm-to-School Program.
- Sec. 22-38d. Farm to school program. Connecticut-Grown for Connecticut Kids Week.

Farm to School Food Safety - Objectives

- What are my existing food safety protocols or documentation?
- **Understand the infrastructure, planning, and food safety requirements** that are needed to move product into a school market.

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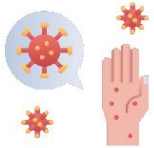
10 Essentials of Food Safety

1. Wash hands

2. Do not come to work if you are sick

3. Clean fruits and vegetables

4. Separate foods to avoid cross contamination



5. Sanitize your workspace

6. **Maintain required temperature**

7. **Keep equipment clean**

8. **Label efficiently**

9. **Train staff**

10. **When in doubt, throw it out!**

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Microbes causing food borne illness

Likely source of contamination	Pathogen	Type	Likely Produce Sources	Symptoms	Duration	Potential Impact	Documented Produce Outbreaks
Soil	*Clostridium botulinum*	Bacteria	Improperly canned low acid foods like vegetables or mixtures of acid and low acid ingredients	Double vision, blurred vision, drooping eyelids, slurred speech, difficulty swallowing, dry mouth and muscle weakness	12-72 hours	If untreated, can lead to muscle paralysis and even death	Cabbage salad, chopped garlic in oil
	Listeria monocytogenes		Bean sprouts, Cabbage, Cantaloupe, Cucumber, Potatoes, Radish, Tomato	Fever, muscle aches, and sometimes GI symptoms	9-48 hours for GI symptoms, 2-6 weeks for invasive disease	Pregnant women and those with comprised immune systems are most susceptible. Illness may lead to death	Cantaloupe, celery, coleslaw mix, lettuce, tomato
Fecal matter from: improperly composted manure, contaminated water (irrigation or post-harvest), food handlers	*Salmonella* spp.		Artichokes, Bean sprouts, Beet leaves, Cabbage, Cantaloupe, Cauliflower, Chilies, Eggplant, Endive, Fennel, Lettuce, Mungbean, Parsley, Pepper, Spinach, Tomato, Watermelon	Diarrhea, fever, abdominal cramps, vomiting	6-48 hrs	Usually infections resolve within 5-7 days, but those with severe diarrhea may require rehydration with fluids intravenously	Cantaloupe, lettuce, sprouts, tomatoes, unpasteurized juice, watermelon
	Shigella spp.		Green onion, Parsley, Lettuce	Abdominal cramps, fever, and diarrhea. Stools may contain blood and mucus	4-7 days	2% develop post-infectious arthritis	Green onions, Lettuce, Watermelon
	E. coli O157:H7		Most fruits and vegetables	Severe diarrhea (often bloody), abdominal cramps and vomiting	1-8 days	Children under 5 are at a greater risk of acute kidney failure	Cantaloupe, Coleslaw, Fruit salad, Lettuce, Sprouts, Unpasteurized juice
	Cryptosporidium	Parasite	Raw produce contaminated by water or an ill food handler	Dehydration, weight loss, stomach cramps or pain, fever, nausea, vomiting and respiratory symptoms	2-10 days but may last 1-2 weeks	Immune deficient infected individuals may experience secondary infection leading to more serious illness	Green onions, Unpasteurized juice
	Cyclospora		Berries, Lettuce, Basil	Diarrhea, stomach cramps, upset stomach, slight fever	1-14 days	If symptoms persist, antibiotics may be required	Basil, Lettuce, Raspberries
	Hepatitis A Virus	Virus	Raw produce or contamination by food handler	Diarrhea, dark urine, jaundice, vomiting and flu-like symptoms	15-50 days, avg 28 days	Dehydration may occur as a result of vomiting	Diced tomatoes, Lettuce, Orange juice, Raspberries, Strawberries, Watercress
	Norovirus		Raw produce or contamination by food handler	Nausea, vomiting, abdominal cramping, diarrhea, fever, headache. Diarrhea is more common in adults, vomiting is more common in children.	12-48 hours	It is highly contagious and dehydration can become a problem, especially in the very young and older adults	Coleslaw, Fresh cut fruit, Melon, Tossed salad

FSMA, GAPs, HACCP: What's the Difference?

Who must comply

WITH THE ENTIRE RULE

- Grow, harvest pack or hold raw produce
- Sell > $500,000 in produce/year
- Sell $25,000 - $500,000 produce per year, but do not meet exemption requirements

WITH QUALIFIED EXEMPTION

- Sell > $25,000 produce, and ≤ $500,000 in ALL FOOD/year and > 50% of that is sold to a qualified end user

Inspection?

Regulatory: Connecticut Department of Agriculture

https://portal.ct.gov/DOAG/Regulatory/Regulatory/Fruit-and-Vegetable-Inspection-Program-Overview

- Entered into Cooperative Agreement with FDA
  - UConn -MOU to carry out education/technical assistance.
- CGAP
- **March 7th-8th, 2023 – Virtual Grower Course-UConn: https://secure.touchnet.com/C21646_ustores/web/product_detail.jsp?PRODUCTID=3693&FROMQRCODE=true**

Where to Get Help with Food Safety

- UConnExtension Offices
- Produce Safety Alliance – Grower Training Course
- CT State Department of Agriculture - inspectors.
- Agriculture Marketing Service GAP Auditor list

Photo: National Center for Appropriate Technology

Food Safety: School Needs ?

- Packaging and Processing - Niche Meat Processor Assistance Network

Photo: Lower Valley Processing; Montana Beef to School Program

Traceability

FDA- new proposed requirement for additional traceabilty.

https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-proposed-rule-food-traceability

- Critical tracking events
- Traceability program records
- Additional requirements
- Exemptions

Meeting School Grading, Packaging, and Labeling Requirements

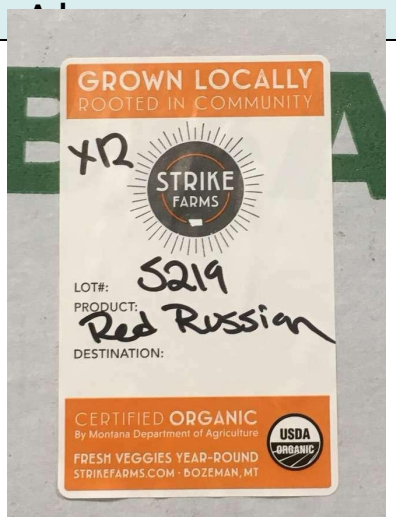
Typical information on a label includes:

- Name and address of the farm
- Julian date 6/19 (170)
- Product
- Grade
- Quantity/count
- Harvest or pack crew identification
- Certifications e.g. Certified Organic, GAP

Farms may use a code system such as the following:

Sp619Ac3

which represents spinach picked on 6/19 from field



Standard Operating Procedure (SOP) Template

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An SOP is for a task that is carried out regularly on a farm. Farm tasks could be in the office, in a processing facility, in the barn, in the field, or off the farm.

Name of specific task or chore:

Objective/purpose: Briefly describe why the task is accomplished (the purpose of the task)

Scope: Where and to whom does the SOP apply?

Responsibility: Who is responsible for making sure the task is completed? Names can be used for this section. Preferably, the worker's title such as supervisor, foreman, QC specialist or driver might be more useful. Consider including the skill level necessary of the worker.

Materials: What specific items (tools, equipment, instruments, supplies, etc.) are needed to complete the task?

Procedure: What are the steps to the task, in order (from start to finish)? Include preparation steps. Use short, direct sentences and simple words wherever possible. Bulleted or numbered lists are usually good.

Verification/documentation: How will you verify that the procedure was completed correctly and what records will you keep?

Date :

SOP Writer (name) :

Adapted from UMASS Amherst and UMaine Extension

Resources

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- UConn Food safety website: https://foodsafety.uconn.edu/
- Records required:

https://producesafetyalliance.cornell.edu/sites/producesafetyalliance.cornell.edu/files/shared/documents/Records-Required-by-the-FSMA-PSR.pdf

- Farm Food safety plan template:

https://gaps.cornell.edu/educational-materials/farm-food-safety-plan-template/

- Farm safety checklist

https://gaps.cornell.edu/sites/gaps.cornell.edu/files/shared/documents/Decision-Tree-Checklist.pdf

- SOP: https://ag.umass.edu/vegetable/fact-sheets/standard-operating-procedures
- https://extension.umaine.edu/publications/wp-content/uploads/sites/52/2020/03/SOP-fillabel-form.pdf
- Other resources:

https://producesafetyalliance.cornell.edu/training/trainer-resources/

Applied Activity – School Food 101

The United States Department of Agriculture dictates food safety requirements for schools.

False: Food safety requirements are established at the state or food service authority level. Learn more about food safety in Module 4.

Next Steps!

List Your farm - Farm to School Directory

Get Food Safety Literate, Insurance and other baseline requirements.

Grants and support to develop your business.

Other resources to support you…

Checklist

- ❑ Decide what products are best suited to plan for
- ❑ Explore price range and investment benefits
- ❑ Take Food Safety courses & Implement Food Safety procedures
- ❑ Website and marketing development
- ❑ Reach out to a Food Service Director
- ❑ Adapt crop plan to reflect the district interests

Post-Survey

Survey	To Be Completed	Format
Pre-survey	At the start of the training	Paper and in person or virtual
Post-survey	At the end of the training	Paper and in person or virtual
Follow-up survey	6-months to 1-year after this training	Online (you will receive an email invitation 6-months to 1-year from now to complete)

Post-Training Survey Link: **https://www.surveymonkey.com/r/PostFTSProducer**

The *Bringing the Farm to School: Agricultural Producers' Toolkit* was developed in partnership by USDA Food and Nutrition Services, the National Center for Appropriate Technology, and the National Farm to School Networ

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AGRICULTURAL PRODUCERS' TOOLKIT

Bringing the Farm to School