Schools are allowed, and encouraged, to purchase a wide variety of foods from local producers. The **Wisconsin Department of Public Instruction memo regarding local purchasing for schools** lays out the guidelines for local purchasing.

Before diving into a farm to school program, it is important to assess your capacity to purchase locally grown product. Each school district varies in its ability to create local purchasing relationships. Assessing this ability is important for you and any new local vendors as you move forward. Use the **school nutrition director survey** to assess your current needs and capacity. Share this tool with any potential local vendors or community partners looking to work with you.



Wisconsin memo regarding local purchasing for schools



School nutrition director survey

Get your basic farm to school questions answered with our **frequently asked questions** tool. It includes information about food safety, insurance and more.



Wisconsin Farm to School frequently asked questions

Familiarize yourself with the **seasonal availability of Wisconsin foods** with this calendar. Farm to school is more than fruits and vegetables. Consider incorporating Wisconsin-grown grains, legumes, meats and dairy products like yogurt, milk and cheese into your school menu.



Seasonal availability of Wisconsin foods

Licensing and labeling requirements

It is important to know the regulations for purchasing locally grown products. The sale of most food products (other than whole, raw fresh fruits and vegetables) is regulated by the Wisconsin Department of Agriculture, Trade and Consumer Protection. The **licensing, labeling and regulation requirements in Wisconsin** tool offers a detailed look at state requirements by product and market. Schools fall under the "institution" category.

4 Wisconsin Farm to School



Licensing, labeling and regulation requirements in Wisconsin

State processing and licensing requirements for sales to schools

Food item sold to school	Wisconsin state requirements
Fresh produce, whole, uncut	None
Fresh produce, minimally processed	Must come from licensed facility
(chopped, shredded)	
Dairy	Must come from licensed dairy plant
Meat	Must be processed at a USDA or
	Wisconsin state inspected facility
Honey	No license required (see detailed
	regulations for exceptions)
Maple syrup	Must be processed in licensed facility

Food safety

Food safety is an important consideration for all food purchases made by schools. School nutrition directors prioritize food safety and want assurance that vendors are reducing this risk. Many producers follow practices on their farms that maximize food safety. Examples include having a manure management plan, water cooling greens to remove field heat, using clean boxes for delivery and providing clear trace-back of product through labeling.

At this time there are no regulations on the sale of fresh fruits and vegetables. However, there may be changes coming soon due to the Food Safety Modernization Act. In the meantime, we recommend you work with farms that follow good agricultural practices. You can find more information about good agricultural practices, and what

questions to ask farmers in the tool buy local, buy safely: a guide for evaluating food safety practices at local produce farms. The buy local, buy safely checklist provides a set of questions to ask farmers about their food safety practices.



Buy local, buy safely guide



Buy local, buy safely checklist



Mt. Horeb fourth graders sample heirloom tomatoes

There are many ways to assess the food safety practices of the producers you want to work with. This may be as straightforward as having growers provide answers to the buy local, buy safely checklist tool above, requesting they create an on-farm food safety plan (below) or ensuring a third-party audit such as Good Agricultural Practices (GAP) has taken place.

The Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) has compiled a **food safety website for farm to school** that provides information on state and federal regulations for individual farms, plus additional resources such as templates for assessing food safety risks: https://datcp.wi.gov/Pages/Growing_WI/FarmtoSchoolFoodSafety.aspx.

Initiate conversations about food safety with potential vendors so they clearly understand your needs. Some school nutrition directors are comfortable with the assurance gained from the buy local, buy safely checklist and a face-to-face conversation with a new vendor. Others want to see a new vendor's operation firsthand. The **on-farm food safety information for food service personnel** guide provides information on touring farms for food safety. There is no one correct approach to ensure food safety from seed to plate. Producers, school districts and distributors, when involved, must work together to ensure an informed food safety plan is in place, and works for all entities. The following **food safety success story** provides an example of one farm to school program's approach of building in expertise through a community partnership.



On-farm food safety information for food service personnel



Food safety success story

Community engagement

It is important to recognize that farm to school is not only the job of the school nutrition program, as it can sometimes be perceived. The benefits of farm to school are considerably richer and longer lasting when multiple school partners and advocates are involved. Diverse participation from school nutrition staff, administrators, teachers, nurses, parents, students and more is invaluable. These advocates can make all the difference in building programs that have ongoing community support and synergy. Ultimately, community engagement is a critical part of a sustainable farm to school program.



6 Wisconsin Farm to School

Advocates are motivated to invest their time and talents in farm to school programs for different reasons. For some, it is about the well-being of their children. For others, it is about support for local farms or the financial implications of the program. No matter what the reason, it is important to have a variety of people engaged in the process.

Farm to school activities that may be coordinated by community partners and other champions can include, but are not limited to:

- Local product research and procurement assistance
- Volunteer coordination
- Light food processing tasks
- Cafeteria or classroom taste tests
- Grant writing and administration
- School garden coordination or other hands-on educational activities
- Creation and dissemination of educational and outreach materials about a farm to school program
- Working with local media to stimulate coverage
- Scheduling and facilitating planning meetings
- Incorporating farm to school language in school wellness policies
- Presentations to school board members, parent-teacher associations, teachers, local organizations and other groups to broaden their awareness and support

Potential advocates from the community won't know the value of your farm to school program if they don't know about it! Present farm to school concepts to your school board, parent-teacher organization, staff and/or community groups to educate them and raise awareness about your program. The **farm to school 101 powerpoint** and

overview will help in your outreach to key audiences. The **county health** ranking and roadmap website provides resources to help you engage your community: www.countyhealthrankings.org/roadmaps/action-center/work-together.



"Farm to school 101" powerpoint



Wisconsin Farm to School overview



Bayfield County students work in th school garden

Community support for farm to school

School community

Administrators
Teachers
Parents
Students
School board members
School nurses

Key practitioners

School nutrition program staff
Local producers: individuals or groups cooperatively organized
Distributors of local product

Community partners

Non-profit organizations Local businesses Local government Colleges and universities

Advocates & experts

Local public health officials and medical practitioners
Local Extension educators
Community economic development experts

8 Wisconsin Farm to School



Date: September 2010

To: Authorized Representatives for School Nutrition Programs in Wisconsin

From: June Paul, Director, School Nutrition Team, Wisconsin Department of Public Instruction

Tom Leitzke, Director, Bureau of Food Safety and Inspection, Wisconsin Department of

Agriculture, Trade and Consumer Protection

James Kaplanek, Section Chief, Food Safety and Recreational Licensing, Wisconsin

Department of Health Services

Subject: Locally Grown, Fresh, Raw, Whole Fruits and Vegetables

Public or private schools are permitted to purchase locally grown fresh, whole, raw fruits and vegetables and/or accept donations of such items. Specific examples of locally grown produce include:

- Intact fruits and vegetables, such as strawberries, whole carrots, radishes, and fresh market tomatoes.
- Vegetables cut during harvesting, such as lettuce, celery, broccoli, and cauliflower when it involves rough field dressing only (such as removing the uneatable outer leaves).

Sources of locally grown fresh produce include farms, farmer's markets, produce auctions, community gardens, school gardens and home gardens.

Farms and other establishments that supply prepared or processed products are required to have licenses. For fruits and vegetables, preparing would include: peeling, cutting, dicing, or cooking. Licensing is also required for the manufacture or preparation of food for sale through the process of canning, extracting, fermenting, distilling, pickling, freezing, baking, drying, smoking, grinding, cutting, mixing, coating, stuffing, packing, bottling or packaging, or through any other treatment or preservation process.

Please note that a new law, Wisconsin Act 101 (pickle bill), allows home-canned fruits and vegetables to be sold without a license under certain circumstances. School agencies participating in the school nutrition programs (National School Lunch Program, School Breakfast Program) must comply with all sanitation and health standards as required by applicable state agency and/or local laws and codes. The Wisconsin Food Code states that food prepared in a private home may not be used or offered for human consumption in a food establishment. Home-canned fruits and vegetables made under the Home Canning/Pickle Bill ARE NOT AN APPROVED SOURCE for any school food service operation.

Department of Agriculture, Trade and Consumer Protection licensing exclusions from the state statutes and administrative rules are provided in the attachment.

Attachment: Department of Agriculture, Trade and Consumer Protection Licensing Exclusions from the State Statutes and Administrative Rules – Produce

Chapter 97: Food Regulation

97.29 Food processing plants. (1) DEFINITIONS (g) "Food processing" means the manufacture or preparation of food for sale through the process of canning, extracting, fermenting, distilling, pickling, freezing, baking, drying, smoking, grinding, cutting, mixing, coating, stuffing, packing, bottling or packaging, or through any other treatment or preservation process.

"Food processing" includes the activities of a bakery, confectionary or bottling establishment, and also includes the receipt and salvaging of distressed food for sale or use as food does not include any of the following:

- 6. The washing and packaging of fresh fruits and vegetables if the fruits and vegetables are not otherwise processed at the packaging establishment.
- 8. Any other activity exempted by the department by rule.

97.30 Retail food establishments. (2) LICENSE. (b) *Exemptions.* 1. A license is not required under this section for any of the following:

- a. A retail food establishment that sells only packaged foods or fresh fruits and vegetables, if the establishment does not sell potentially hazardous food and does not engage in food processing.
- b. A retail food establishment which is primarily engaged in selling fresh fruits and vegetables, honey, cider or maple syrup produced by the operator of the retail food establishment, if that retail food establishment is not engaged in other food processing activities.

ATCP 70: FOOD PROCESSING PLANTS

"Food processing" does not include any of the following:

(f) The washing and packaging of fresh fruits and vegetables if the fruits and vegetables are not otherwise processed at the packaging establishment.

Chapter ATCP 75: RETAIL FOOD ESTABLISHMENTS

- **(9)** LICENSE EXEMPTIONS. A retail food establishment license is not required under s. 97.30, Stats., or this section for any of the following:
 - (a) A retail food establishment that sells only packaged foods or fresh fruits and vegetables, provided the establishment does not sell potentially hazardous food and does not engage in food processing.
 - (g) A retail food establishment primarily engaged in selling fresh fruits and vegetables, honey, cider, sorghum or maple syrup produced by the operator of the retail food establishment if no other food processing activities are conducted at that retail food establishment.

School District:					
Contact Name:	tact Name:				
Address:	City/State/Zip:				
Phone:		Ema	nil:		
Fax:					
Other members of I	Farm to Sc	hool Team (if applicat	ole):		
Student enrollr	nent	Average total daily le	unch count	Free and reduced po	ercentage
school	# of students	School	# of students	School	% of students
Elementary school	otadonto	Elementary school	- Ctade: ite	Elementary school	- Staderite
Middle school		Middle school		Middle school	
High school		High school		High school	
Total enrollment		Total daily lunch count		Total % free and reduced	
•	•	fresh, whole produce? to do so in the future?	Y N Y N		
2. Delivery locat	2. Delivery location:				
3. Days of delive	3. Days of delivery: (please check all acceptable) M T W TH F				
4. Is invoice requ	4. Is invoice required with product delivery? Y N				
5. How long afte	5. How long after the invoice is delivered will payment be received?				
6. What is your	6. What is your cooler or refrigerator capacity for storing fresh produce?				
7. Which distribu	7. Which distributors do you currently receive food from?				
8. Comments:	. Comments:				



9.		e the main re all that apply)	asons you are looking to purch	nase Wisconsin-produced product?
	5	Support the Id	ocal economy	Customer demand
	F	Required by s	upervisor	Support Wisconsin family farms
	H	Help preserve	efarmland	Serve fresher, tastier food
	(Other:		
10.	. <u>Cost:</u> If	items from a	local farmer cost more than yo	ou usually pay, can you pay more?
		Yes	No	
	C	Comment:		
11.	and/or p	romotional ad		e doing through signs, flyers, posters, omotional assistance were available,
12.		p of fresh pro	oduce or other topics, if training	kitchen staff focused on efficient and were available?
		Yes	No	
	li	f yes, list type	e(s) of training:	
13.	the men	u and integra		with them to highlight local items on r classrooms? (Free lesson plans nool/resources-for-educators).
		Yes	No	



Please indicate items you would be interested in ordering

Vegetable	Currently Buy	Willing to Buy	Approx. pounds needed per week	Form (whole, shredded)	Comments
Asparagus	Currently Buy	willing to buy	needed per week	Siliedded)	
Beets					
Broccoli					
Brussel Sprouts					
Cabbage					
Carrots					
Cauliflower					
Celery					
Corn					
Cucumbers					
Green Beans					
Greens (collard, kale)					
Eggplant					
Lettuce (Romaine,					
Bibb)					
Onions					
Parsnips					
Peas					
Peppers					
Potatoes					
Pumpkins					
Radishes					
Salad Greens					
Spinach					
Squash (Summer)					
Squash (Winter)					
Tomatoes					
Turnips					
Other:					



Fruit	Currently Buy	Willing to Buy	Approx. pounds needed per week	Form (whole, shredded)	Comments
Apples	Currently Buy	Willing to Buy	needed per week	3iii edded)	
Blueberries					
Cantaloupe					
Cherries					
Grapes					
Muskmelon					
Pears					
Plums					
Raspberries					
Rhubarb					
Strawberries					
Watermelon					
Other:					
Other Products					

Frequently Asked Questions

1) What is farm to school?

Wisconsin Farm to School encourages healthy lifestyles in children and supports local economies. In Wisconsin, farm to school programs connect schools with locally and regionally grown and produced products. Comprehensive farm to school activities include local procurement for the school cafeteria, school gardens, nutrition and agriculture education and activities that engage students such as cooking demonstrations, taste tests and field trips.

2) Why should I offer Wisconsin-grown foods in my cafeteria?

Whether you buy Wisconsin grown food directly from a local farmer or through a food distributor, you're helping to support Wisconsin farmers. Since the food doesn't have to travel very far, you might find that locally grown also means a greater variety of fresher foods. If you work directly with a farmer, you might be able to ask for exactly what you want instead of being tied to standard specifications. Offering locally grown foods in your cafeteria also gives you a chance to use food as a teaching tool and help students understand where their food comes from.

3) Is it okay for me to purchase locally?

Yes. The Wisconsin Department of Public Instruction (DPI) and the USDA encourage schools to incorporate local purchasing and promotion into their meal and snack programs. This can be done in a number of ways depending on your budget, staffing and availability of local foods. Remember, small steps count and starting small is usually a good idea. Additional guidance can be found in the Wisconsin Farm to School Toolkit for School Nutrition Programs as well as through the Wisconsin DPI Farm to School Webpage (http://dpi.wi.gov/fns/f2s.html).

4) What items are available for me to purchase?

A wide range of vegetables, fruit, cheese, yogurt, eggs and meat could all *potentially* be available from local producers. Whether there are farmers, farmer coops or distributors able to meet your specific needs will depend on where you are located. While some produce is not available during much of the school year, some fruits and vegetables are available through the fall as well as stored through the winter (for instance: apples, sweet potatoes, carrots, potatoes and beets). Dairy and meat items are available year round. See the "Get started" section of this toolkit for a produce calendar. The "Locate and purchase local foods" section provides guidance for finding farmers in your area.

5) Do local suppliers carry liability insurance?

Most farms and orchards do carry liability insurance. Sometimes these policies cover only accidents on their property or at a farmers' market, but many of these policies will also cover a business in the case of a food-borne illness from food they sell. This question is included in the producer questionnaire in the toolkit and is good to clarify with producers you purchase from.



Frequently Asked Questions

6) Are local foods safe?

Many school nutrition directors trust local producers, since they know them personally and are aware of their farm practices. Some school nutrition directors feel locally sourced food is as safe as, or even safer than, foods coming from far away, as they are typically handled less before getting to their schools. Regardless of where your food is coming from, you want to be assured food safety is being maximized. There are three main ways to do this:

- 1) A school nutrition director can tour the farm/orchard/facility and assess food safety protocols first hand.
- 2) A school nutrition director can ask suppliers to fill out a survey that includes information on production practices related to food safety (a producer survey is in the toolkit).
- 3) Some farms choose to pay to have a Good Agricultural Practices (GAP) audit performed by a third party. These audits are currently geared toward larger-scale farms and can be quite expensive for small- and medium-sized farms to complete. Currently there is no third party certification requirement for farms selling to institutions. Some distributors are beginning to require it of all their suppliers.

*More information about on-farm food safety can be found at the Wisconsin Department of Agriculture website: http://datcp.wi.gov/OnFarmFoodSafety/index.aspx.

Farms that are certified organic already have some elements of a food safety plan in place, as they have strict guidelines on the use of animal manure and compost, are required to perform annual water tests and have an extensive paper trail documenting all inputs onto the farm. In addition, certified organic farms are prohibited from using most pesticides and herbicides that may contaminate food.

Another important consideration with food safety is being able to trace back any food found to be contaminated. This is much easier to do when you know which farm your food came from. Directors should make sure suppliers can deliver product in boxes labeled with the farm name as well as the contents and the packing date.

7) Can I buy Wisconsin-grown product from my distributors?

Yes. Many distributors have carried some Wisconsin-grown product for years. Richland Hills sliced apples are distributed out of Richland Center, Wisconsin, and during the months of September and October most of their apples come from Wisconsin orchards. As more customers request foods produced in Wisconsin, distributors are responding with more options, so it's important you tell your distributors you are interested in supporting Wisconsin producers. In order to promote your local purchasing, it's also useful to request 'grower-identified' product that identifies the specific farm it comes from, rather than simply a broad 'Wisconsin-grown' label.

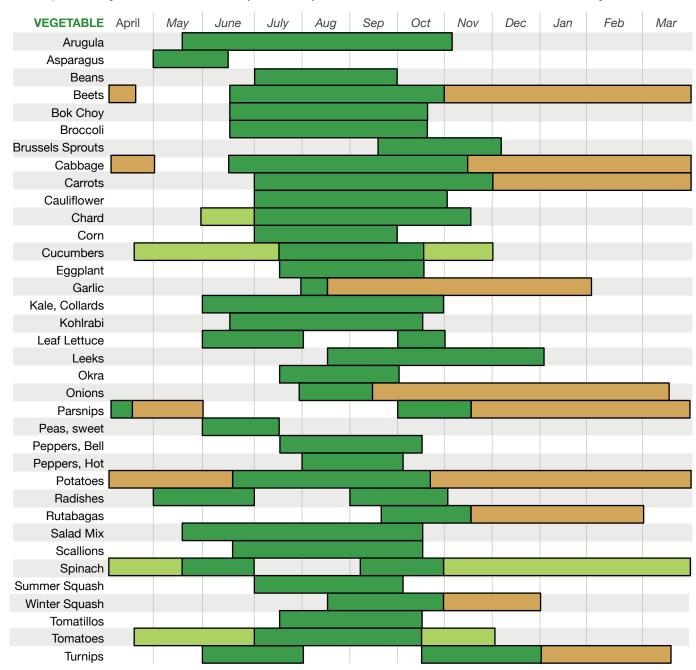
8) Can I afford this?

Some foods purchased from local suppliers will cost more, others will cost less. Some local foods may cost more per pound but have equivalent value, because you get more useable portions per pound. If you find a local item your students like, you may be able to offset any additional cost through increased participation. The answer is yes, but you have to be mindful of both your budget and your broader goals as you determine how to integrate local product into your program.

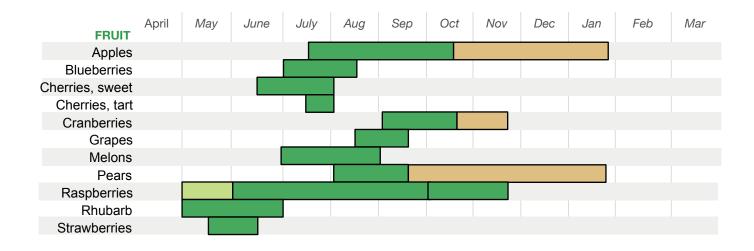


Seasonal Availability of Wisconsin Fruits and Vegetables

The bars represent average dates of harvest and availability which can vary with such factors as weather conditions, farm location and varieties grown.



Year round Wisconsin foods include meats, poultry, cheese, eggs, milk, dry beans, mushrooms, popcorn, hickory nuts, maple syrup, honey and sorghum.



LICENSING, LABELING, AND REGULATION REQUIREMENTS

State requirements that affect local food marketers may include inspection of processing facilities, review of labels on packaged food products, inspection of scales, and collection of food samples to be analyzed for contaminants or composition requirements. Department of Agriculture, Trade and Consumer Protection (DATCP) inspectors typically visit local food marketing operations if warranted by consumer complaints.

Overview of Food Marketing Regulations

DATCP's Division of Food Safety has regulatory authority over food sold in Wisconsin. Generally, the more food products are processed, the more they are regulated.

Less Regulation	More Regulation
Raw, unprocessed foods	Processed foods
Single-ingredient foods	Multiple ingredients
Shelf-stable foods	Sold at a location off the farm
Sold to the end consumer	Sold to a retailer for sale to consumer
Small sales volume	Large sales volume

Processed Food Business Licensing

Starting a processed food business will require state and, possibly, federal licensing depending on the products involved. If you plan to primarily sell your products directly to consumers, you will need a retail food establishment license. Internet sales are considered retail sales. If you plan to sell primarily through wholesale distribution, you will need a food processing plant license. Key requirements to obtain either license include:

• The facility must be an approved (commercial grade) kitchen. Using your personal home kitchen is not allowed. If you plan to start the business in your home you will need to construct a separate kitchen room dedicated to this food business. The dedicated kitchen will need to have washable floors, walls, and ceilings. The lighting will need to be adequate

for commercial purposes, and the room must be properly ventilated. A three-compartment sink or NSF-approved dishwasher will be needed for washing your equipment and utensils. A separate hand sink is also required. Some starting operators rent time in an area restaurant, school, or church kitchen to satisfy the separate commercial kitchen requirement without having to invest in a new, separate kitchen of their own.

- Equipment such as stoves, sinks, and mixers must be of approved design, be easily cleaned, and in good repair. If the equipment bears the NSF certification, you can feel certain that it will meet these design requirements.
- Other utensils like pans, bowls, and spoons must be smooth, non-pervious, and easily cleaned. Almost all utensils currently manufactured meet this requirement.

For more information about NSF go to www.nsf.org/regulatory/

For exact legal requirements for commercially processing food in Wisconsin go to www.legis.state.wi.us/rsb/code/atcp/atcp070.pdf

Processed Food Labeling

Accurate information on processed food labels helps consumers make informed choices about food. Labels provide weight and content information to help consumers choose the best value for their money. The ingredient list identifies products consumers may need to avoid due to potential allergic reactions or other health concerns. Your packaged products must be properly labeled with:

- the name of the product
- a listing of the ingredients in decreasing order of predominance by weight
- a net weight or volume statement
- the name and address of the manufacturer, packer, or distributor
- nutrition information, unless exempt

Contact state or local food inspectors for specific questions regarding labeling. DATCP does not require label approval prior to a food product's manufacture or distribution. DATCP's Division of Food Safety does not "approve" labels but its staff will answer questions and provide assistance.

The responsibility to comply with current food labeling requirements rests solely on the manufacturer or distributor of the food products. For specific information about processed food labeling go to http://datcp.state.wi.us/core/food/food.jsp or contact the Division of Food Safety at 608-224-4700 or email food@datcp.state.wi.us

Resources for Food Labeling General Labeling

www.datcp.state.wi.us/fs/business/food/labeling/pdf/food_label_questions.pdf

An 8-page publication covering the most basic information on food labeling called "Frequent Food Label Questions."

General Labeling and Nutrition Labeling

www.cfsan.fda.gov/~dms/2lg-toc.html U. S. Food and Drug Administration (FDA) publication called "A Food Labeling Guide."

94 pages that includes information on basic food labeling as well as information on nutrition facts, trans fat, and allergen labeling.

DATCP Division of Food Safety Labeling Information www.datcp.state.wi.us/fs/business/food/labeling/index.jsp DATCP's Division of Food Safety website provides general information. However, go to the FDA website for the most up-to-date and comprehensive information available.

Food Label Sources

http://datcp.state.wi.us/fs/business/food/labeling/pdf/food_label_sources.pdf

A list of Wisconsin sources for design and printing of food labels.

Meat Business Licensing and Labeling

New processors must meet several standards to obtain a license for a meat business. State of Wisconsin meat plants must meet the same standards as USDA-inspected meat plants and must implement a food safety system called Hazard Analysis Critical Control Point (HACCP). A licensed meat establishment is required to implement HACCP plans and have a Sanitation Standard Operating Procedure (SSOP) in place. The HACCP is a risk-based approach to manufacturing food products that identifies the critical step(s) in the manufacturing process and performs a monitored, quantifiable function in those places where there is a danger of causing or promoting microbiological, physical, or chemical contamination. The SSOP is a written plan that outlines the monitored procedures followed to maintain overall plant sanitation, including daily cleaning, regularly scheduled maintenance, food handling practices, and employee hygiene.

Labeling meat products differs from other processed foods due to the greater risks and requirements that meat processing involves. The State of Wisconsin meat inspection program and meat establishments work together to ensure that meat products produced and sold comply with required standards for safety, identity, and wholesomeness set by the state and federal governments.

For references to specific aspects of meat labeling, see Chapter 55 of the Wisconsin Administrative Code: www.legis.state.wi.us/rsb/code/atcp/atcp055.pdf It explains labeling requirements, including weight, inspection, safe handling instructions, and other pertinent information.

See the first resource below for a summary of the Bureau of Meat Safety & Inspection's labeling guidelines.

Resources for Meat Business Licensing and Labeling

Wisconsin's State Meat Inspection Program http://datcp.state.wi.us/fs/consumerinfo/food/publications/pdf/state_meat_inspect.pdf Standards of safety and purity.

Meat Product Formulation and Labeling

http://datcp.state.wi.us/fs/business/food/labeling/pdf/meat_form_label.pdf

Before a meat or custom/not-for-sale product can be marketed in Wisconsin, its formula must be approved by the Division of Food Safety. Formulations, or formulas, are intended to be a guide to the manufacture of an item of more than one ingredient. In addition to meat, this could include water, spices, cures, flavoring, binders, or extenders.

Other Meat Business Resources

http://datcp.state.wi.us/fs/consumerinfo/food/publications/pdf/start_meat_business.pdf DATCP

"Starting a Meat Business in Wisconsin"

www.uwex.edu/ces/agmarkets/publications/documents/A3811-15.pdf University of Wisconsin Cooperative Extension Direct marketing meat fact sheet.

www.uwex.edu/ces/agmarkets/publications/documents/A3809.pdf
UW Cooperative Extension and Wisconsin DATCP
"Direct Marketing Meat" A comprehensive guide for Wisconsin meat producers.

State Regulations

The State of Wisconsin has developed food regulations for farmers wishing to market to consumers and to grocery stores, restaurants, and institutions. Contact DATCP's Division of Food Safety at 608-224-4700 or email food@datcp. state.wi.us for more information. Read the following pages for a summary of state requirements by product and market.

Local Regulations

Counties, townships, and cities are local government units that may have regulations that apply to your business. Some typical kinds of regulations include:

- Limits on size or location of advertising signs
- Permits required for excavating or new building construction
- Local health codes regarding food preparation and sale
- Zoning regulations on types of enterprises that can be conducted in certain areas
- Requirements for size and placement of parking areas
- Requirements for bathroom and hand washing facilities (especially for agritourism enterprises)

Local government officials and farmers who have started new enterprises agree that it is far better to work together early to avoid problems, rather than trying to fix things that were not properly done or permitted. County and city governments divide up their responsibilities among departments, and the department names can vary from place to place. Rural townships may have their own planning and zoning guidelines. It is best to check with both county and township officials before proceeding on any farm business expansion.

To find out the name(s) of local officials:

- Check your county's website.
- Call the county courthouse administrative office.
- Check the Wisconsin Towns Association website: www.wisctowns.com/town_sites.html

Weights and Measures

The same weights and measures laws apply to direct marketers of farm produce as to all other retailers. Scales must meet standards for commercial scales set by the National Institute of Standards and Technology (NIST). They must be "legal for trade", National Type

Evaluation Program (NTEP) approved (if put into service after January 1, 1997), and be able to be calibrated. Scales do not need to be registered, but are subject to inspection by a state or local representative of weights and measures.

If a commodity is weighed at the time of sale, the scale's indicator must be visible to the consumer. By law, liquid commodities shall be sold by liquid measure and non-liquid commodities shall be sold by weight. The law permits other methods of sale only where the method is in general use and does not deceive the consumer. One exception is eggs. They are sold by both count and size. Closed containers of apples must comply with the USDA grade standards, which must be stated on the container.

Chapter 91 of the Wisconsin Administrative Code provides rules for selling fresh fruits and vegetables. Some, like apples, corn and cantaloupe can be sold by weight or count, while others, like asparagus, beans and potatoes must be sold only by weight.

If an item is packaged before sale, it must be labeled according to the requirements of Chapter 90 of the Wisconsin Administrative Code. The label must list the name of the food, any ingredients other than the raw product, net weight, liquid measure or count as required metric translations are optional but may be helpful in targeting certain ethnic markets name and address of the processor, packer or distributor, a declaration of quantity and any other information required by law, such as grade and sizes for eggs. No quantity declaration is required for packages weighed at the time of sale and for clear packages of six or fewer fruits or vegetables, if the fruit or vegetable is sold by count. If all packages are of uniform weight or measure, an accompanying placard can furnish the required label information.

When a local food producer advertises any prepackaged food product and includes the retail price in the advertisement, the ad must list the package contents by weight or volume or state the price per whole measurement unit. (For example, \$1.25 per pound.)

See page 117 for a link to the Agriculture, Trade and Consumer Protection (ATCP) chapters of the Wisconsin Administrative Code.

VEGETABLES—Raw Type of Sale	Regulations
Producer Selling from Farm	No license required
Producer Selling Door-to-Door or at Farmers' Market	No license required
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	No license required
VEGETABLES—Cut Type of Sale	Regulations
Producer Selling from Farm	Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	Finished product must come from a licensed retail food establishment, food processing plant, or mobile retail food establishment Additional license depends on type of cut vegetable sold Local ordinance may apply Finished product must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from producer's licensed retail food establishment or food processing plant Finished product must be fully labeled
VEGETABLES—Frozen Type of Sale	Regulations
Producer Selling from Farm	Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	Finished product must come from a licensed retail food establishment or food processing plant Additional license depends on type of vegetable being sold Local ordinance may apply Frozen vegetables must be kept frozen Finished product must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from producer's licensed retail food establishment or food processing plant Finished product must be fully labeled

VEGETABLES—Pickled (acidified Type of Sale	and canned) Regulations
Producer Selling from Farm	Must hold a Food Processing Plant License Successfully complete an Acidified Food Training Course Utilize a scheduled recipe approved by a process authority Must comply with FDA Acidified Foods regulation 21CFR114
Producer Selling Door-to-Door or at Farmers' Market	Finished product must come from a licensed food processing plant Local ordinances may apply Finished product must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from a licensed food processing plant Finished product must be fully labeled
CANNED FOOD PRODUCTS (low Type of Sale	acid)—Small Scale Processing Regulations
Producer Selling from Farm	Home or farm-based processing not generally feasible for meats or low acid canned foods such as beans, corn, peas, etc. Inadequate processing during the canning of low-acid foods may cause these foods to become unsafe. Small-scale processing is generally impractical because the equipment needed to produce consistently safe food is highly technical and expensive.
Producer Selling Door-to-Door or at Farmers' Market	Not applicable
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Not applicable
HERBAL AND FLAVORED VINEGA Type of Sale	AR Regulations
Producer Selling from Farm	Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	No license required Finished product must come from a licensed retail food establishment or food processing plant Finished product must be fully labeled
Producer Distributing from Farm to Grocery Store,	Finished product must come from licensed retail food establishment or food processing plant

State Requirements by 110a	uct und market
FRUIT—Raw Type of Sale Producer Selling from Farm	Regulations No license required
Producer Selling Door-to-Door or at Farmers' Market	No license required
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	No license required
FRUIT—Cut	
Type of Sale Producer Selling from Farm	Regulations Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	Finished product must come from a licensed retail food establishment or food processing plant Local ordinance may apply Additional license depends on cut fruit being sold
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from a licensed retail food establishment or food processing plant Finished product must be fully labeled
FRUIT—Frozen Type of Sale	Regulations
Producer Selling from Farm	Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	Finished product must come from a licensed retail food establishment or food processing plant Additional license depends on type of fruit being sold Local ordinance may apply Frozen fruit must be maintained frozen Finished product must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from licensed retail food establishment or food processing plant Finished product must be fully labeled

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FRUIT-BASED BAKERY ITEMS Type of Sale	Regulations
Producer Selling from Farm	Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	Finished product must come from a licensed retail food establishment or food processing plant Mobile retail food establishment license required for unpackaged product sales Local ordinance may apply
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from a licensed retail food establishment or food processing plant Finished product must be fully labeled
BAKERY ITEMS Type of Sale	Regulations
Producer Selling from Farm	Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	Finished product must come from a licensed retail food establishment or food processing plant Mobile retail food establishment license required for unpackaged product sales
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from a licensed retail food establishment or food processing plant Finished product must be fully labeled
DRY FOOD MIXES AND BLEN Type of Sale	NDS Regulations
Producer Selling from Farm	Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	Finished product must come from a licensed retail food establishment or food processing plant Mobile retail food establishment license required for unpackaged product sales
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from a licensed retail food establishment or food processing plant Finished product must be fully labeled

JAMS, JELLIES Type of Sale	Regulations
Producer Selling from Farm	Retail food establishment license required Processed in commercial kitchen
Producer Selling Door-to-Door or at Farmers' Market	Product must come from a licensed retail food establishment or food processing plant Local ordinance may apply Finished product must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from a licensed retail food establishment or food processing plant Finished product must be fully labeled
MAPLE SYRUP Type of Sale	Regulations
Producer Selling from Farm, Door-to Door or at Farmers' Market	No license required Food must be handled in a way that assures food safety Maple syrup must be fully labeled
Producer Distributing to Grocery Store, Restaurant, or Institution	Food processing plant license required Maple syrup must be processed in a commercial facility Maple syrup must be fully labeled
APPLE CIDER Type of Sale	Regulations
Producer Selling from Farm	No license required Cider must be pressed and bottled at producer's orchard Cider must be fully labeled including approved warning statement
Producer Selling Door-to-Door or at Farmers' Market	No license required Cider must be pressed and bottled at producer's orchard Local ordinance may apply Cider must be fully labeled including approved warning statement
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from a licensed food processing plant Must comply with juice HACCP and 5-log reduction Finished product must be fully labeled
HONEY Type of Sale	Regulations
Producer Selling from Farm, Door-to Door or at Farmers' Market or Distributing to Grocery Store, Restaurant, or Institution	No license required for honey sold as beekeeper's own that has no added color, flavors, or ingredients Honey must be handled in a way that assures food safety Honey must be fully labeled including Graded or labeled "Ungraded"

LIVESTOCK—Cattle, Swin Type of Sale	e, Sheep, Goats, Ratites Regulations
Producer Selling from Farm	Retail food establishment license required Livestock must be processed at a state or federally inspected facility Meat may be weighed on-farm with approved scale or weighed by package at processor Product storage must be clean and located in a clean, neat area (house or shed allowed) Product storage must be used exclusively to store meat sold to customers Frozen meat must be maintained frozen Unfrozen meat products must be maintained at internal temperature of 41°F or below Meat must be fully labeled
Producer Sells Live Animals and Consumer Arranges for Processing	No license required
Producer Selling Door-to-Door or at Farmers' Market	Mobile retail food establishment license required Local ordinance may apply Livestock must be processed at a state or federally inspected facility Meat may be weighed on-farm with approved scale or weighed by package at processor Product storage must be used exclusively to store meat sold to customers Product storage must be located in a clean, neat area (house or shed allowed) Unfrozen meat products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Meat must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Warehouse license required Livestock must be processed at a state or federally inspected facility Registration as meat distributor required Warehouse freezer and producer's vehicle must be inspected to ensure it is sanitary and that frozen meat will be maintained frozen Unfrozen meat products must be maintained and delivered at an internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Meat must be fully labeled

	KODICC DI D D'
Type of Sale	XOTICS—Pheasants, Deer, Bison Regulations
Producer Selling from Farm	Retail food establishment license required Livestock must be processed at a state or federally inspected facility Meat may be weighed on-farm with approved scale or weighed by package at processor Product storage areas must be located in a clean, neat area (house or shed allowed) Product storage must be used exclusively to store meat sold to customers Frozen meat must be maintained frozen Unfrozen meat products must be maintained at internal temperature of 41°F or below Meat must be fully labeled
Producer Sells Live Animals and Consumer Arranges for Processing	No license required
Producer Selling Door-to-Door or at Farmers' Market	Mobile retail food establishment license required Local ordinance may apply Livestock must be processed at a state or federally inspected facility Product storage must be used exclusively to store meat sold to customers Product storage must be located in a clean, neat area (house or shed allowed) Frozen meat must be maintained frozen Unfrozen meat products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Meat must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Warehouse license required Registration as meat distributor required Livestock must be processed at a state or federally inspected facility Warehouse freezer and producer's vehicle must be inspected to ensure it is sanitary and that frozen meat will be maintained in a frozen state Unfrozen meat products must be maintained and delivered at an internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Meat must be fully labeled

RABBITS	
Type of Sale	Regulations
Producer Selling from Farm	No license or inspection required for home slaughter or sale Producer maintains custody of meat until sold Meat can only be sold directly to consumer Meat must be handled in a way that assures food safety Frozen meat must be maintained frozen Unfrozen meat products must be maintained at internal temperature of 41°F or below Meat must be fully labeled including "Not inspected"
Producer Selling Door-to-Door or at Farmers' Market	Mobile retail food establishment license required Local ordinance may apply Rabbit must be processed at a licensed food or meat processing plant Frozen meat must be maintained frozen Unfrozen meat products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Meat must be fully labeled including "Not inspected"
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Finished product must come from a licensed retail food establishment or food processing plant Frozen meat must be maintained frozen Unfrozen meat products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Meat must be fully labeled including "Not inspected"
AQUACULTURE—Farmed Fis	
Type of Sale Producer Selling from Farm	Regulations Retail food establishment or food processing plant license required Fish must be fully labeled
Fee Fishing	Fish eviscerated and filleted as a service to paying fee fishing customers is not licensed by Division of Food Safety
Producer Selling Door-to-Door or at Farmers' Market	Mobile retail food establishment license required Frozen fish must be maintained frozen Unfrozen fish products must be maintained and delivered at an internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Fish must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	License required depends on license type at farm Frozen fish must be maintained frozen Unfrozen fish products must be maintained and delivered at an internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Fish must be fully labeled

POULTRY—Farm-Raised Chickens, Ducks, Geese, Guinea Hens, Squab, Turkeys Less than 1,000 birds per year Type of Sale Regulations		
Producer Selling from Farm	No license or inspection required for home slaughter and sale Birds must be healthy and come from producer's own flock Poultry can only be sold directly to consumer Producer maintains custody of birds until sold Processed poultry must be handled in a way that assures food safety Frozen poultry must be maintained frozen Unfrozen poultry must be maintained at internal temperature of 41°F or below Poultry must be fully labeled including "Not inspected"	
Producer Selling Door-to-Door or at Farmers' Market	Mobile retail food establishment license required Local ordinance may apply Poultry must be processed at a state or federally inspected facility Frozen poultry must be maintained frozen Unfrozen poultry products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Poultry must be fully labeled	
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Warehouse license required Registration as meat distributor required Poultry must be processed at a state or federally inspected facility Warehouse freezer and producer's vehicle must be inspected to ensure it is sanitary and that frozen meat will be maintained frozen Unfrozen poultry products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Poultry must be fully labeled	

	kens, Ducks, Geese, Guinea Hens, Squab, Turkeys
More than 1,000 birds per year Type of Sale	Regulations
Producer Selling from Farm	Retail food establishment license required Poultry must be processed at a state or federally inspected facility Product storage must be used exclusively to store poultry products sold to customers Product storage must be located in a clean, neat area (house or shed allowed) Frozen poultry must be maintained frozen Unfrozen poultry products must be maintained at internal temperature of 41°F or below Poultry must be fully labeled
Producer Selling Door-to-Door or at Farmers' Market	Mobile retail food establishment license required Local ordinance may apply Poultry must be processed at a state or federally inspected facility Product storage must be used exclusively to store poultry products sold to customers Product storage must be located in a clean, neat area (house or shed allowed) Frozen poultry must be maintained frozen Unfrozen poultry products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Poultry must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	Warehouse license required Registration as meat distributor required Poultry must be processed at a state or federally inspected facility Warehouse freezer and producer's vehicle must be inspected to ensure it is sanitary and that frozen meat will be maintained frozen Unfrozen poultry products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Poultry must be fully labeled
EGGS Type of Sale	Regulations
Producer Selling from Farm	No license required Eggs must be sold directly to consumer Must be handled in a way to assure food safety Used carton labels can't be misleading (remove original labeling when re-using cartons)
Producer Selling Door-to-Door or at Farmers' Market	Mobile retail food establishment license required Food processing plant license required Eggs must be kept at 41°F or below Eggs must be fully labeled
Producer Distributing from Farm to Grocery Store,	Food processing plant license required Eggs must be fully labeled

DAIRY—Fluid Milk, Cream, Bu Type of Sale	atter Regulations
Producer Selling from Farm (Farmstead Dairy Plant)	Dairy Farm license required for persons or businesses to operate a dairy farm Dairy Plant license required to process all dairy products License required for persons to be in charge of or supervise the making of butter that will be sold Dairy products must be maintained at internal temperature of 41°F or below Dairy products must be fully labeled
Producer Selling Door-to-Door or at Farmers' Market	Mobile retail food establishment license required Dairy products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Dairy products must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	No additional license required when dairy products come from producer's licensed dairy plant Dairy products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Dairy products must be fully labeled
DAIRY—Yogurt, Kefir, Ice Crea Type of Sale	am, Flavored Milk, Sour Cream Regulations
Producer Selling from Farm (Farmstead Dairy Plant)	Dairy Farm license required for persons or businesses to operate a dairy farm Dairy Plant license required to process all dairy products Dairy products must be maintained at internal temperature of 41°F or below Dairy products must be fully labeled
Producer Selling Door-to-Door or at Farmers' Market	Mobile retail food establishment license required Dairy products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Dairy products must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	No additional license required when dairy products come from producer's licensed dairy plant Dairy products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.)

DAIRY—Raw Milk Cheese Type of Sale	Regulations
Producer Selling from Farm (Farmstead Dairy Plant)	Dairy Farm license required for persons or businesses to operate a dairy farm Dairy Plant license required to process all dairy products Dairy products must be maintained at internal temperature of 41°F or below License required for persons to be in charge of or supervise the making of cheese that will be sold Dairy products must be fully labeled
Producer Selling Door-to-Door or at Farmers' Market	Mobile retail food establishment license required Dairy products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Dairy products must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	No additional license required when dairy products come from producer's licensed dairy plant Dairy products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Dairy products must be fully labeled
DAIRY—Pasteurized Milk Chee Type of Sale	ese Regulations
Producer Selling from Farm (Farmstead Dairy Plant)	Dairy Farm license required for persons or businesses to operate a dairy farm Dairy Plant license required to process all dairy products License required for persons to be in charge of or supervise the making of cheese that will be sold Dairy products must be maintained at internal temperature of 41°F or below Dairy products must be fully labeled
Producer Selling Door-to-Door or at Farmers' Market	Mobile retail food establishment license required Dairy products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Dairy products must be fully labeled
Producer Distributing from Farm to Grocery Store, Restaurant, or Institution	No additional license required when dairy products come from producer's licensed dairy plant Dairy products must be maintained and delivered at internal temperature of 41°F or below using any effective method (freezer, dry ice, cooler, etc.) Dairy products must be fully labeled

FOOD SAFETY, FOOD LIABILITY, AND FARM INSURANCES

Marketing Fresh, Raw Fruits and Vegetables

Farmers in Wisconsin are considered an "approved source" for fruits and vegetables they raise themselves. They can sell any quantity, to any person or business, without a food license. Even though no licensing is required, farmers still have to take reasonable care to avoid contamination of their produce with disease organisms. Food safety starts in the field and continues through the process of harvesting, washing, packaging, storing, and transporting fruits and vegetables.

Marketing Eggs

Farmers can sell shell eggs produced by their own laying flock on their farm. No license is required if selling on their farm, but farmers are required to be licensed if they are selling off their property such as to grocery stores, restaurants, or food services. Farmers are considered an "approved source" for shell eggs if they are licensed, follow the safe handling guidelines for shell eggs, and properly label the eggs as defined in Chapter 88.08 of the Wisconsin Administrative Code. Eggs are a perishable product, and must be handled properly to ensure food safety. See page 117 for a link to the Agriculture, Trade and Consumer Protection (ATCP) chapters of the Wisconsin Administrative Code.

Marketing Processed or Prepared Foods

You must be licensed to sell processed or prepared foods. This requires an approved kitchen separate from a home kitchen. Those selling a canned pickled product are encouraged to take a training course in safe canning procedures. The training courses also teach how to conduct pH testing of your product. For more information, call the Division of Food Safety at 608-224-4700 or email food@datcp.state.wi.us

Marketing Meat or Poultry

Farmers can sell meat and poultry products that have been processed at licensed and inspected processing facilities. The rules vary depending on the type and quantity of meat you are selling and to whom you are selling it. For more information on rules and regulations for meat and poultry, go to pages 103 and 106.

Marketing Dairy Products

Dairy products can be produced, processed, and sold directly from the farm with appropriate licensing and in a facility that meets state and federal standards. Training and certifications are required for making cheese and butter. For more information on marketing dairy products, go to page 108.

Food marketers must be familiar with and comply with state and federal food laws. In Wisconsin, the Department of Agriculture, Trade and Consumer Protection (DATCP) is responsible for administering laws concerning weights and measures, packaging and labeling, food advertising and trade practices, and food production and protection (food safety).

Contact DATCP's Division of Food Safety regional office as your first step to obtain food safety information as it relates to food marketing or food processing. Call either the Madison office at 608-224-4700 or the Eau Claire office at 715-839-3844.

Food Safety Guidelines

Wisconsin's Food Law states only safe and wholesome food can be offered for sale. It is illegal to manufacture, prepare for sale, store, or sell food unless the food is protected from dust, insects, and any other unclean, unhealthy, or unsanitary condition. To prevent contamination, equipment must be suitable for the type of product being sold.

Learning about safe food handling is good business for any farmer who wants to market a food product. When you sell a food product to the public, even if you aren't required to have a license, you still need to follow safe food handling practices. Handling food safely can protect your customers from illness and you from liability. Some of the best practices for handling food are common sense, but some practices are not obvious. Restaurant and food service personnel are welltrained in food safety. If you are bringing food products to sell to them, they need to see you are handling products correctly or they may refuse to accept a shipment from you.

Food sold directly from the farm often comes under greater scrutiny than food sold through the typical distributor or grocery store channels. Some in the food industry have a perception that food right from the farm is less safe. Farmers can overcome that perception by carefully following the food industry standards for safe handling of food. If your potential buyers see you are following good practices, it will increase their comfort level in buying directly from a farmer. For more information on Good Agricultural Practices (GAP) and Good Handling Practices (GHP), go to page 112.

It is helpful to learn the guidelines the food industry follows. Hazard Analysis and Critical Control Points (HACCP) is an internationally accepted protocol for ensuring food safety. The HACCP procedures are useful information not only for farmers, but for anyone who is processing or preparing a food for sale to the public. For more information go to: http://sop.nfsmi.org/HACCPBasedSOPs.php

Food Safety Concerns Cross-Contamination

Cross contamination occurs when diseasecausing organisms move from one type of food to another, or from the food handling environment onto food. Some examples include:

- Using a knife and cutting board to cut up a chicken. The knife or cutting board is not cleaned and hands are not thoroughly washed before cutting up lettuce for a salad. The lettuce can pick up salmonella or other bacteria from the chicken residue left on the knife, cutting board, or hands.
- Using a utensil to place pieces of raw meat in a pan for cooking. The same utensil is not cleaned before it is used to remove the cooked meat from the pan, moving the germs from the uncooked meat onto the cooked pieces.

Food Contamination on the Farm

Food contamination can happen in the field during the growing season, harvest and packaging, or transport, all before the products get to point-of-sale. Contamination can be caused by fecal material coming in contact with vegetables or water-borne bacteria. Some examples include:

- A field worker fails to wash hands thoroughly after using the bathroom and returns to picking vegetables.
- Rain water flows across a barnyard and past a nearby packing shed. The water splashes on a crate of lettuce being hauled to the shed, thus contaminating the lettuce with barnyard germs.

Preventing Food Contamination in the Field

Ways to prevent contamination include:

- Keep pets and livestock out of areas where food is grown, processed, packaged, transported, or otherwise handled.
- Be aware of wildlife in your fields, remove or cover wild animal feces if possible, and avoid picking fruits or vegetables from areas right next to wild animal feces.
- Pay attention to the routes you take on your farm. Avoid tracking soil or mud from livestock areas into vegetable or fruit areas.
- Direct rain run-off from livestock areas away from vegetable or fruit areas.
- If manure is used for fertilizer, allow plenty of time for it to break down between spreading and harvest of a crop. The USDA Organic program rules require that manure must be tilled into the soil at least 120 days prior to harvest of a crop that has direct contact with the soil (such as lettuce), and at least 90 days prior to harvest of a crop that does not have direct contact with the soil (such as sweet corn).
- If you irrigate, look for ways to avoid contamination of irrigation water.

Preventing Food Contamination During Packing, Storing, and Transport

Ways to prevent contamination include:

- Wash hands again, and again, and again.
- Keep watch for anything that could cause cross-contamination.
- Make sure water used for washing fruits and vegetables is from a clean source and is not contaminated on its way to the wash area.
- When washing fruits and vegetables, it is generally best to wash them under running water that can drain away rapidly. Soaking a batch of vegetables in a tub of water can cause cross-contamination if one of the vegetables is contaminated.
- Keep clean, washed, ready-to-eat vegetables and fruits separate from raw vegetables and fruits.
- Keep packaging areas clean. Clean packing tables with a disinfectant solution in between batches of fruits or vegetables.
- Don't stack dirty things on top of clean things. Keep meat, poultry, and egg products physically separated from fruit and vegetable products.
- When transporting, don't load produce with non-produce items.

What is GAP/GHP?

There is an increasing focus in the marketplace on good agricultural practices to verify farms are producing fruits and vegetables in the safest manner possible. Third-party audits are being used by the retail and food services industry to verify their suppliers conform to specific agricultural practices. *Good Agricultural Practices* (GAP) include on-farm production and post-production processes resulting in safe and quality food products. *Good Handling Practices* (GHP) include those used in handling and packing operations that minimize microbial contamination of fresh fruits, vegetables and tree nuts.

The U.S. Department of Agriculture (USDA) Agricultural Marketing Service, in partnership with state departments of agriculture, offers a voluntary, audit-based program to verify agricultural practices. GAP/GHP audits verify the implementation of a basic food safety program on the farm. This includes examining the farm practices and handling/packing procedures focusing on packing facilities, storage facilities, and wholesale distribution centers. These audits are based on the U.S. Food and Drug Administration's Guidelines to Minimize Microbial Contamination for Fresh Fruits and Vegetables and are a fee-based service.

USDA-trained and -licensed auditors provide GAP/GHP certification. GAP certification audits are conducted during harvest when harvest crews are at work. GHP audits are performed when the packing operation is running and workers are present. This federal/state audit program does not cover processed fruits and vegetables. (Inspection of food processors is provided by DATCP's Division of Food Safety.)

The GAP certification process covers three sections of the USDA Federal/State Audit Checklist for farm operations that do not pack their own products:

- 1. General questions
- 2. Farm review
- 3. Field harvest and field packing

The GHP certification process is an add-on for farm operations that conduct packing of fresh fruits and vegetables. The process includes three additional sections in the audit checklist:

- 4. Packing house review
- 5. Storage and transportation (optional)
- 6. Traceback (optional)

Every operation must compile a food safety program that outlines the standard operating procedures and policies that are in practice for the requirements in each section of the audit. In certain circumstances, documentation must also be provided to substantiate practices or analyses of possible contamination.

Go to www.ams.usda.gov/AMSv1.0/getfile?dDocName= STELPRDC5050869 to view the full USDA Audit Verification Checklist. General questions and parts 1–5 apply to GAP/GHP farm operation audits.

Contact Tim Leege at 715-345-5212 or via email at tim.leege@wisconsin.gov

Prevent Food Contamination During Processing and Preparation

Ways to prevent contamination include:

- Wash hands again, and again, and again.
- Watch for anything that could cause cross-contamination.
- Clean and sanitize all utensils, cutting boards, countertops, or other surfaces in between batches of food.
- Wash all vegetables and fruits prior to processing and keep separate from unwashed vegetables and fruits.
- Keep meat, poultry, and egg products physically separated from fruit and vegetable products.
 In a refrigerator, store raw meats that might drip juices in a container that will not leak.
- Follow safe canning procedures.

Produce from Flooded Areas

Generally speaking, state and federal food safety regulations do not cover flooding situations. Regulations governing manure and pesticides also do not address flooding. However, produce that has come in contact with flood water is considered adulterated and cannot be sold for human or animal consumption. For more information go to www.uwex.edu/ ces/ag/issues/ExtensionResponds-Flood.html for resources on flood issues regarding homes, agricultural production, and frequently asked questions.

Go to www.datcp.state.wi.us/ flood2008/VegetableFloodGuidelines.pdf for DATCP's June 2008 fact sheet: "Produce from flooded areas: Considerations for growers, packing houses, and processors"

On-Farm Food Safety

Regardless of the size of your farm business or the products grown, all farmers selling food products for public consumption must be aware of food safety and the tips they can observe to minimize contamination.

Public concern about food safety has increased in recent years and farmers should be aware that proper steps need to be taken with their products to eliminate possible avenues of contamination. Safe produce begins with the production and handling practices on the farm. Products grown and sold with little biological contamination are less likely to result in health hazards caused by poor handling during later preparation stages. Farmers and their employees have the critical job of minimizing product contamination by learning about potential sources of contamination and by using Good Agricultural Practices (GAPs).

GAPs are a set of recommendations that can improve the quality and safety of the food products grown. These general guidelines can be incorporated into or adapted by any production system. GAPs focus on four primary components of production and processing: soils, water, hygiene, and surfaces.

Soils

Manure is a good form of fertilizer but contains pathogens which may be harmful if there has been insufficient time for bacteria to break down volatile components. You can minimize the risk of manure contamination by using the following steps:

- Allow a minimum of 120 days between manure application and fruit and vegetable harvest.
- Incorporate manure into soil or use a cover mulch after application to reduce risk of product contamination from rain or irrigation splash.
- Use aerobic composting of manure which destroys microbes.
- Apply manure in fall to allow competing bacteria to neutralize volatile components.



Food safety starts on the farm and is a consideration from post-harvest handling through sale to the consumer. Proper handling techniques prevent contamination of food during packing, storing, and transport.

Water

Water used for irrigation, cooling, processing, or cleaning equipment and facilities should be free of microbial contaminants. Avoid using surface water for post-harvest handling procedures. Regularly test your water supply for bacteria contamination. Additionally, water sanitation products are available for produce washing water.

Hygiene

Proper hygiene and health, clean clothes and shoes, and safe practices can assure safe food. Provide clean and appropriately stocked restroom and hand washing facilities for field and processing employees to decrease the risk of product contamination.

Surfaces

Produce comes in contact with surfaces during harvest and processing. These include containers, transport bins, knives, and other utensils, sorting and packaging tables, and storage areas. Basic GAPs to help ensure clean surfaces include:

- Keep potential contaminants such as soil and manure out of the processing area or facility.
- Remove spoiled produce in the field.
- Clean and sanitize equipment and facilities daily.
- Control animal contamination.

Source: On-farm Food Safety: Guide to Good Agricultural Practices (GAPs), Iowa State University Extension PM 1947a. This publication has several references and resources for more information about general produce food safety, GAPs, and food safety plans with websites listed. www.extension.iastate.edu/Publications/PM1974A.pdf

Resources for On-Farm Food Safety

 $www.gaps.cornell.edu/educational materials.html\\ Cornell~University$

Click On "Food Safety Begins on the Farm"

A Grower's Guide to Good Agricultural Practices for Fresh Fruits and Vegetables.

www.gaps.cornell.edu/rks.html Cornell University

Farm and packinghouse recordkeeping worksheets that can be customized to fit a farm's standard operating procedures.

www.gaps.cornell.edu/Eventscalendar/USDA_GAP_GHP_Audit_Matrix_PP.pdf Cornell University

Preparing for a USDA GAP/GHP Audit. Shows examples of different logs that can be used in preparing for an audit.

www.oregon.gov/ODA/ADMD/docs/pdf/gap_safety_program.pdf Oregon Department of Agriculture Sample Food Safety Program that can be modified to fit a farm operation.

www.uwex.edu/ces/agmarkets/publications/documents/A3811-17.pdf

UW Cooperative Extension

"Fruit and Vegetable Safety on the Farm"

www.oznet.ksu.edu/library/fntr2/foodasyst/foodasys.pdf Kansas State University

A food safety risk management guide for the producer. Includes an overall checklist for food safety risks during production and marketing of beef, poultry, and produce.

 $www.wiscons in dairy artisan.com/food_safety_study_guides.html$

Wisconsin Dairy Artisan Network

Link to food safety study guides for state dairy licensing.

http://datcp.state.wi.us/fs/business/food/publications/index.jsp

Wisconsin Department of Agriculture, Trade and Consumer Protection *Food code fact sheets.*

http://agriculture.sc.gov/UserFiles/file/ GAPGHP%20Brochure.pdf U.S. Department of Agriculture GAP/GHP program brochure includes answers to frequently asked questions.

www.cfsan.fda.gov/~dms/prodguid.html U.S. Food and Drug Administration "Guidelines to Minimize Microbial Contamination for Fresh Fruits and Vegetables"



Eggs are a perishable product and must be handled properly to ensure food safety.

Processed Food Safety

Fruits, vegetables, and other food products can be processed on a small scale if safe and sanitary methods of processing and handling are followed. These processed foods include jams and jellies, pickled or acidified fruits and vegetables, herbal or flavored vinegars, and even baked goods.

Farm-based processing is generally not feasible for meats or low-acid canned foods such as beans, corn, and peas. Inadequate processing during the canning of low-acid foods may cause these foods to be unsafe. Small scale processing of these foods is generally impractical because the equipment needed to produce consistently safe food is highly technical and expensive.

Certain kinds of foods are "potentially hazardous." This term applies to food that may become unsafe if not held at appropriate temperature of 41°F or below or 135°F or above, depending on the product. Potentially hazardous foods of animal origin include products such as milk, milk products, eggs, meat, poultry, and fish. Foods of plant origin that are potentially hazardous include plant foods that are heat-treated, raw sprouted seeds (such as alfalfa sprouts), cut melons, and garlic-in-oil mixtures. Potentially hazardous foods must be handled with appropriate temperature control to ensure food safety.

If you start a small-scale business processing foods such as pickled products, herbal vinegars, dressings, or any food sold in air-tight containers (canned food), state and federal regulations require you use an approved written process, or recipe. You must submit your scheduled process (recipe) to DATCP's Division of Food Safety (DFS) prior to licensing. DFS does not approve processes, but will review and evaluate the process based on available scientific data resources. You must submit the process, or recipe, to a "competent process authority" for evaluation. A process authority would either provide you with a written statement that your process is safe, or may recommend you do further testing before the process can be approved.

If you intend to sell your product outside of Wisconsin, or use ingredients originating from outside Wisconsin, you must file your process

with the U.S. Food and Drug Administration (FDA). Since almost all processes use an ingredient from an out-of-state source, you will invariably have to file your process with the FDA if you thermally process low-acid or acidified food products. Operating under a Hazard Analysis and Critical Control Points (HACCP) plan requires filing your process with the FDA and is not necessary for acid foods. Retailing an acidified food requires an approved process, applying for a variance, and passing better processing school.

For more information on obtaining an approved written process prior to licensing, call the Division of Food Safety at 608-224-4700 or email food@datcp.state.wi.us

For HACCP guidelines through FDA, go to: www.cfsan.fda.gov/~lrd/haccp.html

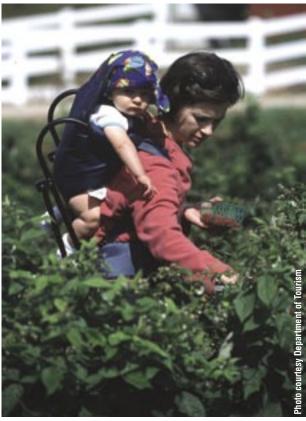
Liability Concerns

Most farms and farm businesses, and certainly farms with direct and intermediate marketing enterprises, have complex mixtures of potential personal and business liabilities. Insurers nationwide are gaining experience with alternative farm enterprises. Because farm insurance needs are complex, you should work directly with an insurance agent to identify your particular needs and to obtain the kinds of coverage necessary.

Farmers who market products need to regularly review their insurance needs with an insurance agent and attorney. Liability questions are more challenging than those raised by simple physical property coverage. Insurance companies offer a diverse range of coverage. Individual policies are available for physical loss of property, liability, and workers' compensation, as well as coverage for other specific needs. The alternative most local food marketers select is a package policy that combines all types of coverage in one policy.

Liability and Farm Insurances

Farmers are exposed to liability for their enterprises, whether conducted on the premises or away from them, such as while selling at a farmers' market. You are also exposed as a result of injuries to you or one of your employees. If your product causes harm to the buyer, you may be held liable. Liability insurance is



Besides assessing rules and regulations for your business, you must determine the risk involved in your enterprise. Whether selling on-farm or through various markets, farmers need to regularly review insurance needs for their business.

essential to pay for sums you may become legally obligated to pay.

The main areas of insurance needed typically include liability for products sold, for visitors to the farm, for farm workers, as well as coverage for the value of crops grown and property and equipment owned.

Product Liability

Liability for the food that you sell is called "product liability." This is handled differently depending on where and how much product you sell. On-farm sales may be covered through your regular property insurance package, but don't assume that is the case. Ask your insurance agent if you are covered if someone gets sick from food that you sold. If you are selling to grocery stores or food services, they may require you to carry separate product liability coverage. Some farmers' markets require each vendor to carry their own liability coverage. If you are selling product through a distributor, you probably will be required to carry product liability coverage. Following safe food handling and food processing practices are necessary

BUY LOCAL, BUY SAFELY!

A Guide for Evaluating Food Safety Practices at Local Produce Farms

Prepared by

Division of Food Safety

Wisconsin Department of Agriculture, Trade and Consumer Protection

July 2011

Why buy local?

Many people are thinking about buying more fruits and vegetables from local growers. There are many good reasons to buy local: supporting the local farm economy, reducing costs and environmental impacts associated with food transportation, and getting fresher products.

But savvy customers won't overlook food safety when considering local purchases!

Just because a grower is small-scale and local doesn't guarantee that they have taken the right steps to ensure that their produce is safe to eat. All growers should consider food safety hazards and take appropriate preventive measures. After all, every grower want to be sure their customers won't contract a food-borne illness from produce.

What food safety hazards can occur in produce? The major hazards associated with produce are disease-causing bacteria such as *Escherichia coli* O157:H7 and *Salmonella*, viruses such as hepatitis A and norovirus, and parasitic protozoa such as *Cryptosporidium*. Many of these hazards have been in the news over the past few years for causing large-scale illness outbreaks.

How do food safety hazards get into produce? Microbes can be carried by livestock, wildlife, or humans, and transferred to produce by contaminated irrigation or spray water, improper manure use, runoff from neighboring farms, wildlife passing through the farm, or poor hygienic practices by farm workers. Many food safety hazards, like *E. coli* O157:H7 and *Salmonella*, are carried in the intestinal tract of animals. Others, including *Listeria monocytogenes*, can be naturally found in soil and water, or the packing shed environment – often surviving for months.

What about pesticides and chemicals? Consumers might also be worried about the potential hazards of pesticide residues or other chemical contaminants. These hazards haven't been in the news as much as microbes, but they are still important. Many customers base their purchasing decisions on how growers use agricultural chemicals, and will ask produce farmers about their use of agricultural chemicals. In this guide, though, we'll focus on the hazardous microbes.

What do food safety regulations say about produce? Wisconsin food safety regulations say little about produce sold directly to consumers. In addition, the regulations for restaurants and retail food establishments only say that produce should be obtained from an approved source. This guidance was written to help growers and their customers understand the best practices recommended for producing safe fruits and vegetables. In the future, some larger growers will be required to meet produce safety standards set by the U.S. Food and Drug Administration (FDA). These standards are not likely to be in place before 2013.

What's the most straightforward way for a grower to become an "approved source"? Upto-date United States Department of Agriculture (USDA) certification for implementing Good Agricultural Practices (GAPs) is a straightforward indication that a grower has taken appropriate food safety measures. For more information about the USDA GAPs program, technically known as the Fresh Produce Audit Verification Program, go to the following website: http://www.ams.usda.gov/AMSv1.0/gapghp.

There are a variety of other organizations that audit produce-growing operations for good agricultural and handling practices; many of them are listed at the Cornell University National GAPs Program website (http://www.gaps.cornell.edu/weblinks.html).

What if a grower is a certified organic grower? A certified organic grower meets the standards of the National Organic Program (NOP). Some aspects of the NOP standards, such as those for use of manure as fertilizer, relate directly to food safety hazards. However, the NOP does not address most of the major steps that must be taken to prevent contamination of produce with disease-causing microbes. So, organic certification isn't a reliable indicator of how well the grower controls food safety hazards.

How can a grower adequately ensure food safety without being GAPs-certified? First, the grower should have a written food safety plan, which they can show to customers, and documentation that shows the plan is being followed. The food safety plan should address each of the questions listed in this guide. For each of the questions asked, a "Yes" answer indicates that an important step is being taken toward ensuring crop safety. At the back of this guidance is a score sheet you can use to make a more detailed evaluation of a food safety plan.

For the questions in this guide, there is a general principle to follow for minimizing food safety hazards, and suggested steps to take in following the general principle. You may notice that the suggested steps sometimes seem vague. This is because the factors affecting contamination of produce are often very complex, and make it hard to provide hard-and-fast answers on how to ensure that produce is safe to eat. For example, a well-accepted principle is "prevent exposure of

produce crops to livestock waste". But is it acceptable if there is a dairy farm on the adjoining section of land? What if the dairy farm is downhill from the produce? What if the dairy farm is uphill from the produce but there is a vegetation buffer zone between the dairy farm and the produce? What if the dairy farm is ¼ mile from the produce farm? How about ½ mile? There are no clear answers to these questions, because each situation is unique and complex. What you can set as a standard is that for each question in this guide, at least one preventive step is taken towards a "Yes" answer.

WATER

Anytime water contacts produce there is the potential for contamination. If the water contains disease-causing microbes, these microbes can be transferred to the produce. Here are some key water-related questions to answer in evaluating a farm's food safety system.

• Is the best-quality available water used for post-harvest operations such as rinsing harvested crops?

Guiding principles: The closer it is to harvest time, the more important it is to use high-quality water. The best-quality water should be used when working with the harvested product.

Steps to take: The water supply for post-harvest operations should be potable (suitable for drinking and from an approved source); growers may also choose to add a food-grade sanitizing agent, such as sodium hypochlorite, chlorine dioxide, or peracetic acid, to post-harvest water.

These sanitizing agents can be purchased from a sanitation chemical supply company.

• Is the water source protected from possible contamination via run-off, flooding, and animal livestock operations?

<u>Guiding principle</u>: Once water becomes contaminated, it is very hard to clean up. Preventing contamination is the best strategy.

Steps to take: Wells should be properly constructed and sealed to minimize the chance of contamination. Both surface water and ground water may be influenced by point and non-point source contamination, especially during storms. Growers can protect crops from flooding or run-off by building run-off structures, waterways, diversion berms and buffer areas. Ideally wells should be upslope from animal livestock operations. Fences and gates may be useful in keeping animals away from surface water sources.

• Is there minimal contact between irrigation water and produce?

<u>Guiding principle</u>: Direct contact between irrigation water and produce should be avoided, or at least minimized.

Steps to take: Growers can use drip or furrow irrigation which is less likely to contaminate produce than overhead spray irrigation. Experts recommend growers develop a schedule of testing the irrigation water for *Escherichia coli*, a bacterium indicative of fecal contamination. Some experts recommend testing for fecal coliform bacteria or total coliform bacteria. These bacterial groups can also indicate fecal contamination. The higher the level of *E. coli*, fecal coliform, or total coliform bacteria, the greater the distance you should try to have between irrigation water and crops.

Is spray-water suitable to contact produce?

<u>Guiding principle</u>: The water used for delivering chemicals and/or amendments to plants should be of the same quality as water used for post-harvest operations, i.e. potable (safe to drink and from an approved source).

<u>Steps to take</u>: Growers should review and document their water sources and usage to be sure that their best-quality water is designated for spraying and workers know and follow the correct procedure for making spray solutions. It is also important to adequately clean spray reservoirs between uses.

• Is there any re-use of water in post-harvest operations? If so, is the re-use done counter to the process flow? Are sanitizing agents added to the water?

Guiding principle: Every time water is re-used, the levels of microbes and organic matter in it will likely increase. If water is re-used, each successive use should be farther away from the finished product. Sanitizing agents can reduce the transfer of microbes from water to produce.

Steps to take: Growers should examine their sources of post-harvest water and determine if re-use occurs. If it does, procedures should be developed, and followed, for ensuring that the "direction" of water usage is opposite to the product flow. For example, water that is used to rinse or cool harvested crops could be re-used to irrigate crops. To prevent the potential transfer of bacteria from step to step, growers may want to add a food-grade sanitizing agent, such as sodium hypochlorite, chlorine dioxide, or peracetic acid, to post-harvest water. These sanitizing agents can be purchased from a sanitation chemical supply company.

SOIL AMENDMENTS

Growers may add various substances to the soil to provide nutrients and organic matter that support healthy produce crops. These soil amendments can be important for creating a healthy soil ecosystem that improves crop yield and improves soil aeration and drainage. However, soil amendments can also be an important source of harmful microbes. Animal manures are the most problematic soil amendments because they can contain a variety of disease-causing bacteria such as *E. coli* O157:H7 and *Salmonella*.

• If manure is added to the soil, has the manure been properly composted to ensure that fecal bacteria have been destroyed during the composting process?

<u>Guiding principle</u>: Manure should be properly composted before application, or, if not composted within recommended limits, applied well in advance of harvest time.

Steps to take: The National Organic Program (NOP) specifies time/temperature/turning requirements for composting of manure. The NOP requires that the manure have an initial carbon: nitrogen ratio between 25:1 and 40:1 and states that temperatures between 131° F and 170° F must be sustained for at least three days using an in-vessel or static aerated pile system. In a windrow composting system, temperatures must be sustained between 131° F and 170° F for at least 15 days; during the 15 days the materials must be turned a minimum of five times. If manure-composting does not achieve these time/temperature/turning requirements, the composted manure should be applied at least 120 days before harvest if the edible portion of the crop is likely to have direct or indirect contact with soil (e.g. a root crop, green beans that might

be splashed while growing). If the edible portion of the crop is not exposed to soil, there must be at least a 90-day application-to-harvest interval.

Are in-process and finished-product composted manure stored properly?

<u>Guiding principle</u>: Manure that is in the process of being composted can be a source of contaminants. If composted manure is not stored properly, it can become re-contaminated before it is used.

<u>Steps to take</u>: Manure composting should be done where runoff will not contaminate produce fields. For example, the composting area should not be up-slope from the fields. Once composting is complete, care should be taken to prevent cross-contamination with manure that is not yet composted. Growers should avoid storing finished compost down-slope from the in-process composting operation.

• If non-composted manure is used as a soil amendment, is it applied at the correct time? Guiding principle: If application of non-composted manure is done too close to harvest-time, disease-causing microbes in the manure are more likely to be transferred to the produce.

Steps to take: There are no requirements regarding when properly composted manure can be applied to soil. But if non-composted manure is used, the NOP standards require that it be applied at least 120 days before harvest (exposed edible portion) or at least 90 days before harvest (non-exposed edible portion).

PHYSICAL LOCATION OF FIELDS

 Do the fields have topographical features that might prevent run-off contamination of produce?

<u>Guiding principle</u>: Steep slopes can lead to contamination via runoff from adjacent fields or surface-water sources. Contamination is much less likely if the fields are up-slope from adjacent fields or surface-water sources.

<u>Steps to take</u>: If the ground slopes toward the crops, growers should create physical barriers such as trenches to prevent contamination. Buffer vegetation zones may also be useful as barriers. If crops are up-slope from potential contamination, physical barriers are far less necessary.

Do the fields have an appropriate land history?

Guiding principle: Previous uses of fields can leave a reservoir of disease-causing microbes.

Steps to take: Growers should determine the previous history of their fields and avoid growing produce crops too soon after the fields have been used in animal agriculture. For example, land that has been used for raising cattle within the past three years may not be appropriate for growing vegetables.

• Do adjacent fields present an insignificant risk of contamination?

<u>Guiding principle</u>: Adjacent fields can be a source of disease-causing microbes.

Steps to take: Ideally, produce fields should not be near animal feedlots or other potential sources of animal waste contamination. Growers should also consider the spread of waste via run-off and wind. A grower may prevent runoff contamination by using physical barriers such as ditches or diversion berms. Buffer zones containing trees or bushes may reduce contamination carried by wind.

Is animal movement controlled to minimize the risk of contamination?

Guiding principle: Wild and domestic animals can carry disease-causing microbes in their intestines. If these animals get into a produce field, their feces can contaminate produce.

Steps to take: Fences and buffer zones may reduce animal traffic through produce-growing fields. A more challenging situation occurs on farms that use livestock to pull plows or other farm implements. Short of "diapering" of horses (as is sometimes done with horse-drawn carriages in cities), there are few practical preventive steps available. At the very least, the animals should be used in the fields at least 90 or 120 days before harvest (the same standard as for applying non-composted manure).

• Does the area have a small population of birds?

<u>Guiding principle</u>: Birds are common carriers of *Salmonella* and can shed these bacteria over a large area.

Steps to take: There are no effective practical methods available to prevent bird traffic through farms. Eliminating bird habitat near the farm is often not desirable from an ecological viewpoint. To some extent, though, bird populations are related to insect populations, so an effective Integrated Pest Management system may be the best preventive step available.

PERSONNEL

 Are employees properly trained in personal hygiene and how to prevent contamination of produce?

<u>Guiding principle</u>: If employees don't have good hygiene practices, they are more likely to spread disease-causing microbes to produce during harvest, washing, and packing operations.

Steps to take: Regardless of the number of employees, growers should have a set of hygiene policies for employees to follow, and a documented system for teaching employees about these practices. It is a good idea to have introductory training for new employees and refresher training for experienced employees. Training should be clear, at a level that employees can understand, in the appropriate language, and should ideally involve demonstrations of desired practices. Records of training sessions (dates, attendees, topics) should be kept.

• Are employees with illnesses or open wounds prohibited from handling produce?

Guiding principle: Ill employees can contaminate produce with disease-causing microbes.

Steps to take: Plainly speaking, the grower should take steps to be sure that employees with vomiting, diarrhea, or other symptoms of gastrointestinal illness do not handle produce.

Employees with these symptoms should be sent home or assigned tasks that do not involve contact with produce or any surface that contacts produce. If an employee has a skin wound, they can handle produce if the wound is completely covered with a waterproof covering. If not, they should also be sent home or re-assigned. Employees with symptoms of respiratory illness (e.g. coughing, runny nose, sneezing) should be sent home or assigned tasks that do not involve contact with produce or any surface that contacts produce. The grower should have written policies for dealing with employee illnesses and be sure that employees understand the policies.

• Are adequate restroom facilities available to employees?

Guiding principle: If employees relieve themselves near the growing area, disease-causing microbes can be transferred to the produce. If employees don't have the opportunity to wash their hands after using the restroom, they may spread disease-causing microbes to produce.

Steps to take: The grower should prevent this type of contamination by providing adequate restroom facilities that are convenient for employees to use. The restroom facilities may have to be portable on large farms. The facilities should always include adequate facilities for washing and drying hands. The facilities must be maintained so that they do not become a cause of produce contamination.

• Do field workers have a separate area for breaks and meals?

<u>Guiding principle</u>: Food and beverages can be spilled and spills will attract pests. Pests can transfer disease-causing microbes to produce.

<u>Steps to take</u>: To prevent transmission by pests attracted to spills, the grower should require that food and beverages are only consumed in a break area that is separate from the produce fields and packing areas.

FIELD SANITATION

• Are appropriate harvest containers used?

<u>Guiding principle</u>: Harvest containers can transfer disease-causing microbes to produce. This transfer is more likely if the containers are made out of porous materials like wood, burlap, or reused corrugated fiberboard.

<u>Steps to take</u>: Smooth, cleanable non-absorbent container surfaces are less likely to harbor microbes and contaminate produce. Ideally, growers should use containers that are cleanable and constructed out of a food-grade plastic material.

Are harvest containers inspected, discarded if necessary, cleaned and sanitized regularly?

<u>Guiding principle</u>: Even if harvest containers are made out of appropriate materials, they can still become a source of disease-causing microbes if they are not kept in good condition, cleaned and sanitized.

Steps to take: Ideally, growers should have a documented program for inspecting containers, discarding damaged containers, and cleaning and sanitizing the containers that are in good condition. The process of inspect-clean-sanitize should be done, and documented, regularly, with the frequency increasing when conditions such as rainy weather lead to greater amounts of soil on the containers. Remember that if containers are nested, the outside of each container should be inspected, cleaned, and sanitized, too. Drying the containers in the sunlight, before they are used, nested, or stored is recommended because the ultraviolet light in sunshine can kill microbes.

• Is farm equipment cleaned and sanitized routinely?

<u>Guiding principle</u>: Farm equipment is often overlooked as a source of produce contamination.

Microbes that contaminate equipment during an earlier task can be transferred to the produce or its surrounding environment during a later task.

<u>Steps to take</u>: Growers should carefully clean and sanitize equipment before it is used with fresh produce, especially if the equipment has been used with debris or manure. Growers should have a schedule for equipment cleaning and sanitizing and document that it is followed.

PACKING SHED SANITATION

• Is the building designed to prevent cross-contamination?

Guiding principle: Cross-contamination with disease-causing microbes can occur when washed produce touches unwashed produce or equipment that also handles unwashed produce.

Steps to take: The grower should design and operate the packing shed so that the product flow is linear – unwashed produce enters the shed at one end, and washed packaged produce leaves the shed (or goes into the cooler) at the other end. The shed should be operated so that unwashed and washed produce are kept separate, never coming into contact with the same surfaces or each other. Access to the packing shed should be limited to reduce opportunities for contamination. The grower should construct the shed so that birds, rodents, and insects are kept out. If there is a maintenance area in the shed, it should be physically separated from the washing / packing area. Growers might document the layout of their packing shed by preparing a floor plan sketch or by taking digital photographs.

• Are containers inspected, discarded if necessary, cleaned and sanitized regularly?

Guiding principle: In the packing shed, bins and other containers may hold produce for relatively long periods of time. Alternatively, some containers get re-used many times throughout the day, making it important to minimize contamination by frequently cleaning and sanitizing them.

Steps to take: Some growers use two different colors of bins – one for unwashed produce, and one for finished produce. Ideally, growers will have a written procedure for container inspection, cleaning, and use.

Are personnel trained in minimizing microbial contamination?

<u>Guiding principle</u>: Just like in the field, packing shed employees can contaminate produce with disease-causing microbes.

Steps to take: Growers should make sure that packing shed employees understand and follow good hygiene practices. Hand-washing stations should be convenient and accessible, and the employees should be trained when and how to properly wash their hands. Toilet facilities should be physically separate from the packing and storage areas, but within a convenient distance, and equipped with appropriate hand-washing facilities.

• Is equipment cleanable, cleaned and sanitized as appropriate?

<u>Guiding principle</u>: If equipment traps debris or isn't cleaned and sanitized properly, it can be a source of contaminants.

Steps to take: Growers should only use equipment that is designed so that it can be easily cleaned. Growers should maintain the equipment condition, and repair or replace damaged, pitted, corroded, or cracked equipment, because these defects can harbor debris and the microbes in it. Growers should design packing lines to avoid "dead ends" where produce (and microbes) can accumulate. Equipment should be positioned so that there is enough space around it to allow for adequate inspection and cleaning. The grower should have a schedule for inspection, cleaning, and sanitizing, and documentation to show that the schedule was followed.

• Are packaging materials stored in a sanitary manner?

<u>Guiding principle</u>: Contaminated packaging materials can transfer disease-causing microbes to produce.

<u>Steps to take</u>: Growers should store packaging materials in a dry, separate area where they will not become contaminated.

Are coolers adequately maintained?

<u>Guiding principle</u>: Microbes grow more slowly when the temperature is cold. Maintaining cooler temperatures at 45°F or lower will minimize microbial growth and, for most produce, extend its shelf life.

Steps to take: Growers should have a regular schedule for monitoring, and recording, cooler temperature. Growers should remember to regularly empty, clean and sanitize the cooler so that it doesn't become a source of contaminants. Cooler floors should be kept clean and dry.

Cooling unit coils and fan housings should be regularly cleaned.

• Are trucks maintained in a sanitary condition?

<u>Guiding principle</u>: Contaminants on the inside of the truck can lead to unsafe produce if they are transferred to the produce.

Steps to take: Growers should avoid using trucks that back-haul animals, raw meat, fish, or poultry, or non-food-grade materials. There should be a regular schedule for cleaning and sanitizing the truck interior, with records kept to show that the schedule was followed.

Refrigerator conditions should be maintained in the truck cooler during transportation.

SUMMARY

Using this guide will help you evaluate food safety practices in produce operations, but it is just a start. You may want to periodically re-evaluate practices, especially if unusual growing conditions occur (e.g. flooding), a new food safety concern is discovered, or new preventive measures are developed.

Buy Local, Buy Safely! A Guide for Evaluating Food Safety Practices at Local Produce Farms Checklist

Instructions

The following six topic tables describe Guiding Principles and supporting Best Practices that growers may use to improve the safety of their produce. For each Guiding Principle, check the box next to each food safety Best Practice used by the grower. Record the number of checkmarks in Column A to the right of the table and multiply the number of checkmarks by the number of points listed in Column B. Record the total as a subtotal in Column C. (Round scores that end in .99 up to the nearest whole number.) The highest possible score for each Guiding Principle is 4. Add the subtotals to determine the total score for each topic table and record those total scores below. Add the scores below to calculate the overall score.

VI. PACKING SHED SANITATION	
V. FIELD SANITATION	
IV. PERSONNEL	
III. FIELD LOCATION	
II. SOIL AMENDMENTS	
I. WATER	

Results

The highest score possible is 100. A score between 95 and 100 indicates that all but a few Best Practices have been adopted. To identify specific Best Practices that could be adopted, review the subtotal scores in each table. Guiding Principles in which the score is zero indicate a need for improvement.

I. WATER

	A. NO. OF	В.	C. SUB
GUIDING PRINCIPLES	CHECK		TOTAL
SUPPORTING BEST PRACTICES (CHECK EACH THAT IS USED)	MARKS	POINTS	(A X B)
A. Best-quality water is used when working with harvested product.		2	
1. Potable water is used for post-harvest operations.			
2. Food-grade sanitizing agent is added to potable water used for post-harvest operations.			
B. Water sources should be protected from contamination via run-off, flooding, animal agriculture operations.		1.33	
3. Municipal water supply used.			
4. Backflow prevention devices used.			
5. Private well is used and it is:			
properly constructed and sealed			
upslope from animal agriculture operations			
protected from run-off and separated from animals by fencing.			
C. Direct contact between irrigation water and produce should be minimized.		2	
6. Drip or furrow (not spray) irrigation is used.			
7. Irrigation water is regularly tested for fecal indicator bacteria; practices are adjusted, based on test results.			
If irrigation is not done, check this box and count as 2 checks in column to the right.			
D. Best-quality water should be used for spraying.		2	
8. Potable water is used for spraying OR food-grade sanitizing agent is added to non-potable water used for			
spraying.			
9. Spray reservoirs are cleaned between uses.			
E. If water is re-used, the re-use should be done counter to process flow and/or sanitizing agents should be added to		2	
the water.			
10. Re-use is done counter to process flow.			
11. Sanitizing agent is added to water.			
If water is not re-used, check this box and count as 2 checks in column to the right.			
WATER TOTALS (ADD COLUMN C. TOTAL POSSIBLE POINTS = 20)			

II. SOIL AMENDMENTS

	A. NO. OF	В.	C. SUB
GUIDING PRINCIPLES	CHECK		TOTAL
SUPPORTING BEST PRACTICES (CHECK EACH THAT IS USED)	MARKS	POINTS	(A X B)
F. If manure is used as fertilizer, it should be properly composted or applied far enough in advance of harvest. (Check ONE box for the practice that best describes what is done.)		4	
12. Manure is composted in accordance with National Organic Program (NOP) standards: C : N ratio between 25			
: 1 and 40 : 1; in-vessel or static aerated pile is between 131 and 170°F for at least 3 days; windrow composting is between 131 and 170°F for at least 15 days and compost is turned at least 5 times.			
13. Manure is not used as fertilizer.			
14. Manure is composted but not in accordance with NOP standards. Manure is applied at least 90 days (non-exposed crops) or 120 days (exposed crops) before harvest.			
15. Manure is NOT composted, but is applied at least 90 days (non-exposed crops) or 120 days (exposed crops) before harvest.			
G. In-process and finished composted manure should be stored to prevent cross-contamination.		1.33	
16. Composting area is down-slope from produce fields.			
17. Composting area is down-slope from water source.			
18. Finished composted manure is stored separately and up-slope from in-process composting manure.			
SOIL AMENDMENT TOTALS (ADD COLUMN C. TOTAL POSSIBLE POINTS = 8)			

III. FIELD LOCATION

CHIDING PRINCIPLES	A. NO. OF CHECK	В.	C. SUB TOTAL
GUIDING PRINCIPLES SUPPORTING BEST PRACTICES (CHECK EACH THAT IS USED)	MARKS	POINTS	(A X B)
H. Field topography should prevent run-off contamination of produce.		2	
19. The field is up-slope from adjacent fields or water sources.			
20. Run-off barriers protect the fields.			
I. Previous field uses should not leave a potential reservoir of disease-causing microbes.		4	
21. The field has not been used for animal agriculture within the past 3 years.			
J. Adjacent fields should not be a reservoir of disease-causing microbes		4	
22. The adjacent fields have not been used for animal agriculture within the past 3 years.			
K. Animal movement onto the produce fields should be minimized.		2	
23. The produce fields are surrounded by fences and/or buffer zones that minimize animal traffic.			
24. Animal-drawn farm implements are not used OR animal-drawn farm implements are used but only at least 90			
days (non-exposed crops) or 120 days (exposed crops) before harvest.			
I. Bird populations in and near the fields should not be excessive.		2	
25. Integrated Pest Management is practiced to minimize the number of insects on which birds can feed.			
26. Steps are taken to prevent nesting and roosting near fields and buildings.			
FIELD LOCATION TOTALS (ADD COLUMN C. TOTAL POSSIBLE POINTS = 20)			

IV. PERSONNEL

GUIDING PRINCIPLES SUPPORTING BEST PRACTICES (CHECK EACH THAT IS USED)	A. NO. OF CHECK MARKS	B. POINTS	C. SUB TOTAL (A X B)
M. Employees should be properly trained in personal hygiene and prevention of produce contamination.		1.33	
27. Employees read hygiene practices and sign a statement indicating that they have read and intend to follow			
these practices.			
28. Introductory training in hygiene practices is provided and documented for all new employees.			
29. Refresher training in hygiene practices is provided and documented for all continuing employees.			
N. Employees with illnesses or open wounds should be prohibited from handling produce.		4	
30. Written policies explain that the grower will send ill employees home or assign them tasks in which they			
won't contact produce, and require employees to cover wounds completely with a waterproof covering or be			
assigned to tasks in which they won't contact produce.			
O. Employees should have adequate restroom facilities.		2	
31. Restroom facilities are provided in close proximity to work areas.			
32. Restroom facilities include hand-washing stations with sufficient water, soap, and single-use paper towels.			
P. Employees should have a separate area for breaks and meals.		4	
33. Break area for food and beverage consumption is separate from produce fields and packing areas.			
PERSONNEL TOTALS (ADD COLUMN C. TOTAL POSSIBLE POINTS = 16)			

V. FIELD SANITATION

	A. NO. OF	В.	C. SUB
GUIDING PRINCIPLES	CHECK		TOTAL
SUPPORTING BEST PRACTICES (CHECK EACH THAT IS USED)	MARKS	POINTS	(A X B)
Q. Harvest containers should be constructed and handled to minimize transfer of disease-causing microbes to		1.33	
produce.			
34. Harvest containers are made of smooth, cleanable non-absorbent material.			
35. Harvest containers are regularly inspected for damage and discarded if damaged. Inspection results,			
including discarding damaged containers, are appropriately documented.			
36. Harvest containers are regularly cleaned and sanitized, with appropriate documentation of cleaning and			
sanitizing.			
R. Farm equipment should be cleaned and sanitized before it is used with fresh produce.		4	
37. Farm equipment that is to be used with fresh produce is regularly cleaned and sanitized, with appropriate			
documentation of cleaning and sanitizing.			
FIELD SANITATION TOTALS (ADD COLUMN C. TOTAL POSSIBLE POINTS = 8)			

VI. PACKING SHED SANITATION

	A. NO. OF	B.	C. SUB
GUIDING PRINCIPLES	CHECK		TOTAL
SUPPORTING BEST PRACTICES (CHECK EACH THAT IS USED)	MARKS	POINTS	(A X B)
S. The packing shed should be designed to prevent contamination of produce.		.8	
38. Product flow in the packing shed is linear.			
39. Unwashed and washed produce items are not touched by the same equipment, surfaces, or personnel.			
40. Access to the packing shed is restricted to authorized employees.			
41. The packing shed is constructed to keep pests out.			
42. The maintenance area is separate from the washing / packing area.			
T. Bins and containers in the packaging shed should be maintained, cleaned and sanitized to prevent transfer of disease-causing microbes from the container to the produce.		2	
43. Different color bins are used for unwashed and finished produce.			
44. Bins and containers are regularly inspected and discarded or repaired as necessary, and regularly cleaned			
and sanitized, with appropriate documentation of cleaning and sanitizing.			
U. Packing shed personnel should be trained in minimizing microbial contamination of produce.		1	
45. Employees read hygiene practices and sign a statement indicating that they have read and intend to follow			
these practices.			
46. Introductory training in hygiene practices is provided and documented for all new employees.			
47. Refresher training in hygiene practices is provided and documented for all continuing employees.			
48. Written policies explain that grower will send ill employees home or assign them tasks in which they won't			
contact produce, and require employees to cover wounds completely with a waterproof covering or be assigned to			
tasks in which they won't contact produce.		4.22	
V. Packing shed equipment should be cleanable, cleaned and sanitized, as appropriate.		1.33	
49. The packing line is designed to avoid "dead ends" and is positioned to allow adequate inspection and			
cleaning.			
50. Equipment is food-grade and maintained so that damaged, pitted, corroded, or cracked equipment is			
repaired or replaced.			
51. Equipment is regularly cleaned and sanitized, with appropriate documentation of cleaning and sanitizing.			

GUIDING PRINCIPLES SUPPORTING BEST PRACTICES (CHECK EACH THAT IS USED)	A. NO. OF CHECK MARKS	B. POINTS	C. SUB TOTAL (A X B)
W. Packaging materials should be stored so that they do not become a source of contamination.		4	
52. Packaging materials are stored in a separate, dry area where they will not become contaminated.			
X. Coolers should be kept clean and dry and operated at a cold enough temperature to minimize microbial growth without harming produce quality.		1	
53. Coolers are maintained at 45°F or colder.			
54. Cooler temperature is regularly monitored and recorded.			
55. Coolers are regularly emptied, cleaned (including cooling unit coils and fan housings), and sanitized, with appropriate documentation of cleaning and sanitizing activities.			
56. Cooler floors are kept dry.			
Y. Trucks should be maintained so they don't contaminate produce that is transported in them.		2	
57. Trucks are not used to back-haul animals, raw meat, fish, or poultry; or non-food-grade items.			
58. The interior of each truck is regularly cleaned and sanitized, with appropriate documentation of cleaning and			
sanitizing.			
PACKING SHED SANITATION TOTALS (ADD COLUMN C. TOTAL POSSIBLE POINTS = 28)			

On-Farm Food Safety Information for Food Service Personnel

Farm to Fork is growing rapidly across Minnesota. For example, many schools are interested in purchasing directly from nearby farmers. The goal of this document is to provide a list of questions about *on-farm* food safety practices that food service personnel can use when talking with farmers from whom they are considering purchasing fresh fruits and vegetables.

These questions do not pertain to food safety in your food service kitchen facility. Rather, they relate to *on-farm* food safety. This means the steps that the farmer took to minimize the risk of contamination as the food was grown, harvested and transported to your kitchen door.

The questions are meant to be a guide so that you can have an informed discussion with a farmer about the food safety practices that they use on their farm.

Food is grown in the soil, and under the sky, and

there will always be some risk of contamination. The goal is not to have farmers eliminate this risk, but rather to minimize it through best practices to ensure the safety of consumers.

Most farmers are very committed to on-farm food safety, and farmers should not be offended if you ask about their food safety practices. If done in a conversational manner, most farmers will be happy to talk about their practices. You need to be comfortable with their answers, and if not, explore if they are willing to make some changes or consider not purchasing from the farmer at that time.





Visiting the farm is another great way to get to know the farmer and their operation. By visiting the farm, you can get a good idea of the farmer's operation and their food safety practices.

You can also observe the farmer and the delivery vehicle. Look at their truck. Is it clean? Use your own observation tools. Employees who are in charge of taking in produce should also be told to observe the delivery truck and to share any concerns about cleanliness. What else is in the truck? Is there evidence of a dog in the truck? Is the truck free of trash and debris unrelated to the vegetables? Are there any odors?

For more information, please see the following resources:

UMN website with food safety record-keeping templates for farmers and links and schedules of GAPs workshops for farmers: http://safety.cfans.umn.edu/

Minnesota Department of Health Farm to School Program features step-by-step guidance for setting up your program: http://www.health.state.mn.us/fts

The Public Health Law Center offers resources addressing legal issues of Farm to School: http://publichealthlawcenter.org

National GAPs program at Cornell University: http://www.gaps.cornell.edu

For more information or with questions, please contact:

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On-farm food safety information

Interview Tool

Getting started talking with farmers about food safety:

• Open with: "Can you tell me a little about your food safety practices?" or, "How do you address food safety on your farm?"

As you listen to their response, listen for these words or concepts:

- I have a written food safety plan
- I test my well water annually
- We train all of our staff on our food safety protocols including hygiene, illness and injury reporting
- We don't use raw manure; or, we apply raw manure in the fall; or, we buy composted manure
- I am certified organic or am certified by the Food Alliance. While the Organic and Food Alliance standards are not food safety standards, certified growers often have many key food safety practices already in place on their farm to meet organic and Food Alliance certification standards.
- I've passed a GAP (Good Agricultural Practices) audit, or intend to schedule an on-farm food safety audit. (GAP is similar to a HACCP plan for farmers, but very few farmers in Minnesota are GAP audited, so do not expect the farm to have an audit certificate.)
- I haven't gone through a GAP audit but I've adopted the *on-farm* food safety practices that are relevant for my farm.

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Here are some probe questions you may use to ask about the farmer's food safety practices:

Farm and production practices

- "Do you have a written food safety plan or standard operating procedures related to food safety? If not, how do you document and ensure food safety on your farm?"
 - —If they say no to these questions or do not seem to have thought about food safety, you may consider making a farm visit.
- "Will the produce be rinsed or washed?"
 - —If they rinse or wash their produce, it needs to be done with potable water.
- "How often do you have the well water tested for contaminants and how do you treat and manage your wash water?"
- "What do you do to keep livestock and other animals (including dogs) out of vegetable fields?"
- "How is the produce kept cool and covered before and during delivery?"

Worker health and hygiene

- "Do you have health and hygiene training for employees? What does it cover?"
 - —Listen for training on hand washing procedures, illness and injury reporting.
- "Are restrooms with hand washing facilities including single-use towels, soap and clean running water available to all workers?"
 - —Note: sanitizing gels are not a substitute for hand washing.
- "Are workers excluded from handling food products if they are ill or have a fever or diarrhea?"

Packaging and tool cleanliness

- "How will product be packaged? Have boxes been used previously, and if so for what?" —Boxes should appear clean and intact, like new, when the produce arrives. Boxes that have held meat or poultry should not be used to transport produce.
- "How often do you clean your harvest tools and containers?"
 - —There is no one right answer. The tools should be cleaned at the end of the day. The containers should appear clean.
- "Where do you pack your produce?"
 - —They may field pack or have a packinghouse. Produce should be kept off the ground. Packinghouse surface should be regularly cleaned and sanitized.

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Assuring Food Safety

Viroqua tackles on-farm food safety

"Before considering pricing I need some assurance that a local farmer is using safe food handling practices on his or her farm," says Marilyn Volden, Food/Nutrition Program Supervisor for Viroqua Area School District.

As a result, Volden has developed on-farm food safety protocols to ensure safe, fresh, and healthy food for students.

Surveys, farm visits and trainings

A combination of farmer food safety surveys, farm visits, and food safety trainings provide Volden with the assurance she needs to purchase fruits and vegetables from a local farmer.

While many still see food safety issues as major barriers to large-scale, statewide farm to school programming in Wisconsin, Volden doesn't see it that way. From the ground

up, she has shown that buying direct from small, local family farms is safe and healthy for Wisconsin students.

"I find a better sense of safety in visiting a farm and seeing their operating procedures first hand than buying from a big distributor. I want to know where our food is coming from and how it's being produced."

Why Farm to School in Wisconsin?

Fresh fruits, vegetables, and other healthy foods help fight obesity.

Good for farmers

 Schools provide local farmers with new or expanded markets.

Good for the community

 Local farmers are supported and money stays in the local economy.

Good for schools

Overall, schools report a 3-16% increase in meal participation when farm-fresh food is served, thus bringing in more funds.



WISCONSIN FARM TO SCHOOL

Linking the Land with the Lunchroom



Wisconsin Farm to School (F2S)

Farm to school encourages healthy lifestyles in children and helps support local economies. In Wisconsin, farm to school programs connect schools with locally and regionally grown and produced products.

In 2011, 72 WI schools and/or districts actively engaged with F2S!



Goals of Wisconsin Farm to School

➤ Promote children's health by providing fresh, and minimally processed foods in schools to support the development of healthy eating habits





Goals of Wisconsin Farm to School

> Strengthen children's and communities' knowledge about and attitudes toward agriculture, food, nutrition and the environment





Goals of Wisconsin Farm to School

➤ Strengthen local economies by expanding markets for Wisconsin's agricultural producers and food entrepreneurs



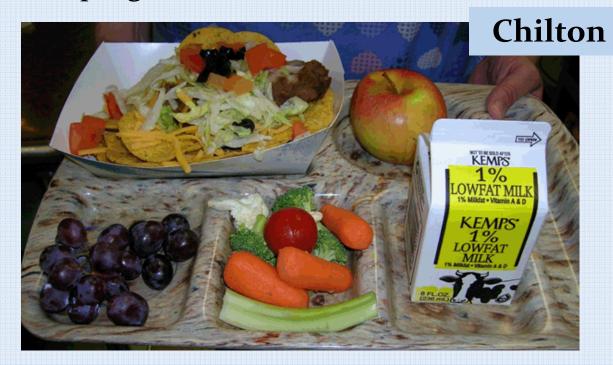


➤ An individual's lifelong well-being depends on healthy eating habits





➤ Children should have access to fresh, healthy and minimally processed food as part of a nutritionally balanced school meals program

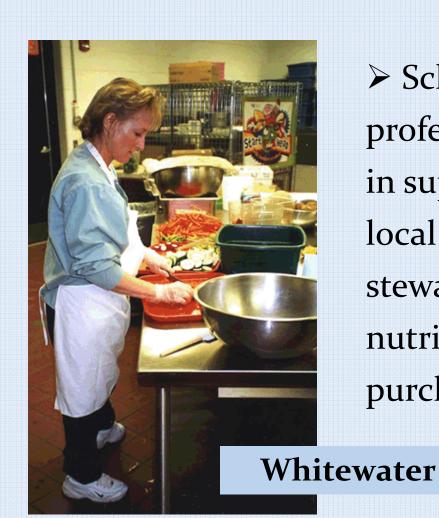




Wisconsin farms that serve local markets make essential contributions to a diverse food system







➤ Schools and nutrition
professionals are important partners
in supporting community well-being,
local economies and environmental
stewardship through their food and
nutrition education programs and
purchasing practices

Community support for farm to school

School community

Administrators
Teachers
Parents
Students
School board members
School nurses

Key practitioners

School nutrition program staff Local producers: individuals or groups cooperatively organized Distributors of local product

Community partners

Non-profit organizations Local businesses Local government Colleges and universities

Advocates & experts

Local public health
officials and medical
practitioners
Local Extension
educators
Community economic
development
experts

Farm to School in Wisconsin

Local, farm-fresh foods can be purchased:

- Directly from farmers
- > From a farmers' market
- > From a growers' collaborative or cooperative
- Through a distributor or broker who procures from local farmers

Types of Farms Working with Wisconsin Schools

- Orchards
- Dairy and meat producers
- Produce: Small, medium and large growers







Using Local Products in School Programs

- > Whole items
 - Salad or fruit/veggie bars



New Richmond

Waupaca County





Using Local Products in School Programs

- Substitute item or ingredient already used
- Develop new recipes and menus to include local products





Using Local Products in School Programs

- Snack programs
- Freezing seasonal items for year round use

Madison



Viroqua



School Food Service Challenges and Opportunities

Delivery

Food safety

Price

Time

Finding Local Producers

Seasonality

Scale/reliable supply

Labor/food prep

Staff skills

Storage/refrigeration

Student preferences

Chilton



Producer Challenges and Opportunities

Price point

Food safety/liability insurance

Delivery

Scale

Time

Meeting packing specs

Seasonality

Storage/refrigeration

Quantity



Challenges and Opportunities

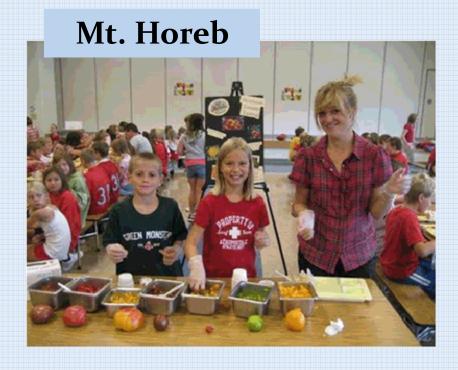
Although challenges exist, there are tools and resources available to address them. Tools and resources for schools and producers can be found at:

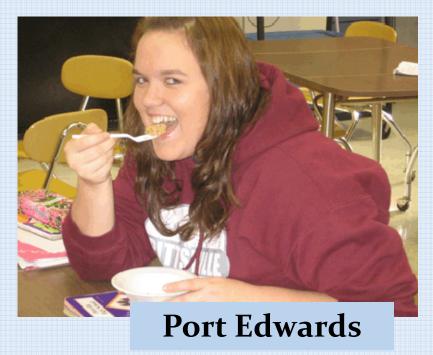
➤ UW Center for Integrated Agricultural Systemshttp://www.cias.wisc.edu/toolkits/



> Taste tests

Cooking demos





> Farm tours

Madison



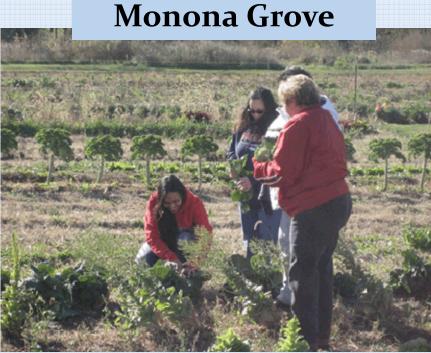


Prairie Du Chien





➤ Field Trips



Chef/farmer visits







➤ School gardens

Greenhouses

Madison





Cooking contests

Composting/recycling

Viroqua

COOKING UP CHANGE 2010 National Healthy Cooking Contest



- > Harvest of the month
 - > CSA, farmers' markets
 - Visual Displays





New Richmond

WI Farm to School Program Support

- UW Center for Integrated Agricultural Systems http://www.cias.wisc.edu/toolkits/ http://www.cias.wisc.edu/category/farm-to-fork/farm-to-school/
- Health in Practice
 http://www.healthinpractice.org/obesity-prevention/farm-to-school
- Make Farm to School Happen http://makefarm2schoolhappen.org/
- Team Nutrition (DPI) http://fns.dpi.wi.gov/fns_f2s
- AmeriCorps (DATCP)
 http://datcp.wi.gov/Business/Buy Local Buy Wisconsin/Farm to School Program
- National Farm to School Network http://www.farmtoschool.org/
- USDA Farm to School Program http://www.fns.usda.gov/cnd/f2s/





Wisconsin Farm to School

Farm to school encourages healthy lifestyles in children and helps support local economies. In Wisconsin, farm to school programs connect schools with locally and regionally grown and produced products.



Goals of Wisconsin Farm to School:

- Promote children's health by providing fresh and minimally processed foods in schools and supporting the development of healthy eating habits
- Strengthen children's and communities' knowledge about, and attitudes toward agriculture, food, nutrition and the environment
- Strengthen local economies by expanding markets for Wisconsin agricultural producers and food entrepreneurs

Comprehensive Farm to School Programming:

The guidelines for a comprehensive farm to school program include:
1) Local or regional procurement, 2) Nutrition and agricultural education, and 3) Student engagement activities such as school gardening.

Not all farm to school programs begin at the comprehensive level. Here are some suggested guidelines for building a comprehensive farm to school program.

Children Win:

Fresh fruits, vegetables and other healthy foods help fight childhood obesity.

Farmers Win:

Schools provide local farmers with new or expanded markets.

Communities Win:

Money stays in the local economy.

Schools Win:

Overall, schools report a 3-16% increase in meal participation when farm-fresh food is served, thus bringing in more funds.

- **Foundational Level**: Start with a focus on local or regional procurement and include at least one of the comprehensive elements listed above
- Building Level: Meets foundational level and includes at least one additional comprehensive element
- **Comprehensive Level**: Includes all of the comprehensive elements

"Farm to school is what Wisconsin needs.

We are helping our farmers and raising healthier kids. It's a win, win, win down the line."

- Diane Chapeta, former Nutrition Director, Chilton and Hilbert School Districts