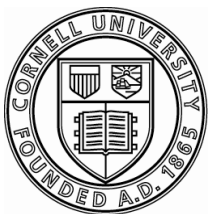


**FOOD SAFETY
RECOMMENDATIONS
FOR
DIRECT DELIVERY**



Cornell University
Cooperative Extension
Jefferson County





FOOD SAFETY RECOMMENDATIONS FOR DIRECT DELIVERY

Direct delivery from the farm to consumers' homes or to local businesses is becoming increasingly popular. In direct delivery sales, producers allow consumers to custom order their farm products via phone, internet, or e-mail. The farmer then harvests and packs a delivery box specific to each customer. The product is then delivered to the customer's door on a prescribed day and time.

The advantage to the farmer is that they know exactly how much to harvest and their time in the field and packing house is efficiently used. A delivery of product direct to the customer's doorstep establishes good will with customers, as well as creating a very loyal customer. Unless the farmer is delivering an inferior product, the customer is very likely to continue to shop with him, as well as spread the word and help to increase the farmer's business.

Consumers enjoy the convenience of having products delivered right to their front doors, just as the milkman used to do. Busy households no longer need to make trips to the supermarket, farmers market or farm stands for their supply of farm fresh foods. It's there on their doorstep within days of each order.

Another type of direct delivery is a mobile market. A farmer or group of farmers will outfit a truck or trailer to display a wide variety of farm products, similar to the old-time huckster wagons. The mobile market will then make scheduled stops in neighborhoods to allow consumers to come out to the truck or trailer and purchase direct from the farmer while in their own neighborhood.

Utilizing direct delivery as a marketing venue requires farmers to weigh the benefit of customer good will, loyalty and satisfaction against the increased cost of manpower and fuel that are part of the direct delivery method. They must also research any necessary permits or licenses they must obtain for mobile marketing, such as a peddler's permit. There are also many food safety considerations inherent in direct delivery marketing. Food safety will be the focus here.

While some direct delivery programs include foods that are purchased for resale, the guidelines that follow refer strictly to foods that are delivered from the grower's farm to the consumer. Foods that are purchased for resale may require additional licensing, for example, ready-to-eat foods would require a 20C license from the NYS Department of agriculture or the county's Health Department.

In order to reduce food safety risks and prevent the likelihood of foodborne illness outbreaks, each farmer needs to understand how to identify risks and implement practices to mitigate these risks. This document is intended to help farmers understand what microbiological, chemical, and physical hazards exist on their farms and with direct delivery enterprises, assess the risks associated with these hazards, and adopt outlined recommendations that can reduce these risks. Each farmer must perform their own risks assessment and determine which guidelines are appropriate for their operation.

POTENTIAL SOURCES OF CONTAMINATION

1. POTENTIAL SOURCE OF CONTAMINATION: TRANSPORTATION

Direct delivery as a venue to connect local farms to consumers is growing in popularity with both farmers and consumers. It appeals to the consumer who has time constraints that make shopping at farmers markets or farm stands difficult, as the farm comes to them instead. Food is loaded onto a truck for delivery direct to a consumer's home or at convenient locations within their neighborhood. Farmers using direct delivery must take special care with transportation to eliminate the risk of contamination of the food products.

Temperature of foods during transport must be carefully monitored. All foods that require refrigeration must be maintained at 41°F or below throughout the transportation process. Frozen foods must be maintained at 0°F and hot foods must be kept at 140°F or above while being transported.

Contamination could come from many sources: debris from past loads remaining in the truck body, road dirt and dust, wind-blown contaminants, bird droppings, etc. Farmers transporting foods must consider the potential contamination of the foods being transported.

RECOMMENDATION: Truck beds used to transport products for consumption should be free from dirt, food residue, livestock or domestic animal manure and dander, chemicals, fertilizers and all other potential contaminants. Further, all loads should be covered or enclosed for transporting food products, either with an enclosed truck body, a truck cap or with a tarp to minimize exposure to the elements during transportation. The truck's enclosed space should be brought to the proper temperature for foods being transported before loading.

RECOMMENDATION: Proper temperatures must be maintained while en route and awaiting pick up. If using ice, there should be accommodations to allow melted ice to run off to ensure food products are not immersed in melted ice water.

RECOMMENDATION: Segregate foods within the load to ensure there is no cross contamination, particularly raw meat, poultry and eggs.

2. POTENTIAL SOURCE OF CONTAMINATION: DROP-OFF

Home delivery often occurs when the customer is not at home. Leaving the food at the home is a food safety risk, but that risk can be minimized by taking steps to maintain proper temperatures and protect the foods from potential contaminants. Also, maintaining a log of drop dates and times would be beneficial in protecting your liability.

RECOMMENDATION: Products should be protected from adverse weather elements; including direct sun, rain, wind; and any other airborne contaminants. They should also be enclosed to protect against pests and rodents.

RECOMMENDATION: Consumers who will not be home should be encouraged to leave a cooler in a shaded location.

RECOMMENDATION: A drop log should be maintained that identifies product dropped at each location, with dates and times of each delivery.

Attachment: Drop Log

3. POTENTIAL SOURCE OF CONTAMINATION: CONTAINERS

The containers used for distributing foods through direct delivery are an important line of defense against food contamination. The farmer should be diligent in providing a container that can be easily cleaned and sanitized. Containers should be of an appropriate material to help maintain the temperature of the product it contains. Foods such as cheese and dairy products must be maintained at 41°F or lower, eggs must be 45°F or below and frozen meats must be maintained at 0°F. Insulated containers or coolers that will maintain a cold temperature will ensure a safe product until the consumers can place the products in their own refrigerators or freezers. Likewise, a container that is awaiting consumer pickup, whether, at a central drop off site or on a consumer's door step, should be kept in a cool place, rather than out in the sun where produce and other products may rapidly deteriorate.

RECOMMENDATION: Direct delivery Containers should be easily washable and sanitized. Containers should be cleaned and sanitized between each use.

RECOMMENDATION: A cooler or insulated container should be used to distribute foods that require cold or frozen temperatures to be maintained.

Products Within the Container Consumers purchase direct from farmers because they believe the foods they receive will be fresh and healthy for their families. Farmers need to protect that trust by ensuring the food they provide is clean, as well as protected against any potential contamination.

RECOMMENDATION: Know and understand GAPs standards and utilize GAPs best practices in production and post-harvest handling of fruits and vegetables.

RECOMMENDATION: Separate boxes should be used to segregate raw produce from potentially hazardous foods such as meats, cheeses, eggs, etc.

RECOMMENDATION: Containers should be covered to eliminate pests, rodents and other contaminants from entering the box.

Resource:

Food Safety Begins on the Farm: Good Agricultural Practices for Fresh Fruits & Vegetables, www.gaps.cornell.edu/

4. POTENTIAL SOURCE OF CONTAMINATION: VENDOR HYGIENE

Farmers must take care to present a positive image to their consumers. Good hygiene is as much a marketing tool as it is a food safety precaution. Clean clothes, hair and body minimize the risk of spreading bacteria, germs and contaminants from person to product.

Whenever a seller has an open wound, it should be immediately cleaned and covered with a bandage. Gloves should then be worn to protect the food from being contaminated with blood and blood borne pathogens.

RECOMMENDATION: All direct delivery farmers and employees should have clean body, hair and clothes and be free from any signs of illness or open sores.

RECOMMENDATION: All farmers and employees must wash hands any time they become soiled, i.e. after using restroom facilities, eating and drinking. Note that anti-bacterial gels are not a substitute for hand washing.

RECOMMENDATION: Smoking should not be allowed while selling and/or handling food. NYS Health Laws prohibit smoking where food is being handled, whether it is preparation or the sale of food.



References:

Food Safety at Farmers Markets and Agritourism Venues: A Primer for California Operators, http://sfp.ucdavis.edu/farmers_market/food_safety.pdf
Farmers Market Guidelines: Minimum requirements for food safety, Oregon Dept of Agriculture, http://oregon.gov/ODA/FSD/docs/pdf/guide_farmer_mkt.pdf
Food Safety Regulations for Farmers Markets, Purdue Extension, <http://www.ces.purdue.edu/extmedia/EC/EC-740.pdf>
Safe Food Handling at Open Markets, Kansas State University Extension, <http://www.ksre.ksu.edu/library/fntr2/FOODASYST/8market.pdf>

5. POTENTIAL SOURCE OF CONTAMINATION: DISPLAY

Mobile markets are a form of direct delivery. Rather than dropping pre-ordered food at a consumer's home or central drop-site, the farmer loads a truck with foods and makes stops along a prescribed route, offering product for sale at each stop. Some farmers have outfitted trucks with display shelving and consumers can either enter the truck to peruse the products for sale, or the farmer will unload tables and set up a display of product for sale, similar to a farmers market display.

Product displays should be designed to reduce consumer handling of products and should be supervised to recognize when cross contamination has happened and allow for all tainted foods to be removed.

Display heights Food displayed off the ground protects consumers by eliminating potential contamination from animals and pests, as well as soil and ground debris. To maximize sales opportunities, a consumer should not have to reach for product below the knees and above the shoulder. This is as much a marketing tool as it is a food safety issue.

RECOMMENDATION: All foods should be kept off the ground or floor during storage and display.

Meat displays Meats must be packaged from the slaughterhouse. While the packaging minimizes the risk of contamination, leaks do occur. Keeping meats separated from other foods on display will further minimize the risk.

RECOMMENDATION: Direct delivery vendors should segregate the foods to ensure there is no cross contamination; particularly raw meat, poultry, or seafood, and eggs.

Display materials The potential for contaminating food at the mobile market may come directly from the containers that farmers use to bring product to the delivery truck, as well as the display table and the containers used to display the foods. To minimize the risk of contamination, containers should be sanitized between uses or vendors must make certain the container holds the same product with each use. All storage containers should also be kept covered to minimize the risk of contamination. Display surfaces should be cleaned between uses or covered with clean tablecloths to prevent contamination from residues of past market sales.

RECOMMENDATION: Storage and display containers should be free from food residue and other debris. If possible, they should be sanitized between uses.

RECOMMENDATION: Display surfaces should be clean.

Shopping bags Once a bag has been used, it should never be used for the sale of foods. It could be contaminated with soil, spoiled food particles, blood from meat, or other contaminants. In addition, bags that are not food grade may leach harmful chemicals into any food that is placed in it.

RECOMMENDATION: Bags for foods sold to consumers should be new and free from chemicals that would contaminate food products.

Egg cartons Reusing egg cartons is a common practice at farmers markets. Environmentally conscious consumers will return egg cartons when they are ready to purchase another. However, used egg cartons can be contaminated with pathogens, such as Salmonella, that can contaminate new eggs that may be placed in the carton. Farmers should consider the risk of contamination when choosing to reuse them.

RECOMMENDATION: Using only new cartons is the safest action. However, if reusing cartons, all prior markings, including producer identification, grade and size statements should be removed from used egg cartons. The cartons should be clean and free of any residue, and re-labeled with the farmer's identification, according to NYS Labeling Laws.

RECOMMENDATION: Shell eggs must be held at 45° or below.



Temperatures Outside of the recommended temperature ranges, bacteria will grow. Any foods requiring temperature control and held outside of the recommended temperature ranges for 2 hours or longer should be destroyed.

When using a cooler to maintain cold or frozen foods, a thermometer should be available to test the temperature throughout the market day to guarantee the appropriate temperature range is maintained. In addition, the ice used must be made from potable water. The cooler should have proper drainage for ice melt to prevent food products from sitting in water. Ice melt should be collected and disposed of properly.

RECOMMENDATION: While on display all hot foods MUST remain hot, 140°F* or above, cold foods MUST remain cold, 41° or below, with shelled eggs held at 45° or below, and frozen foods MUST remain frozen, 0°F or below.*

RECOMMENDATION: All potentially hazardous and prepared/processed foods brought to the market must be prepackaged. Foods prepared on site under New York State Health Department Temporary Food Service Permit should be covered with protective cover, to prevent contamination.

RECOMMENDATION: All ready-to-eat foods, prepared under NYS Agriculture and Markets regulation, such as baked goods, should be pre-packaged.

RECOMMENDATION: All prepackaged foods must be labeled in accordance with New York State Labeling laws.

**There are differences in temperature requirements determined by the regulatory agency. The recommendations above comply with the NYS Department of Agriculture and Markets, as well as the NYS Department of Health.*

References:

New York State Department of Agriculture & Markets Meat Regulations:

www.agmkt.state.ny.us/FS/industry/04circs/Art5BsaleofmeatCIR914.pdf

www.agmkt.state.ny.us/FS/industry/04circs/meatforsaleatretailCIR934.pdf

Small Farms Task Force: A Resource Guide to Direct Marketing Livestock and Poultry,

<http://www.nyfarmersmarket.com/publications/ResourceGuideDirectMarketingMeatPoultry.pdf>

New York State Department of Agriculture & Markets Egg Regulations:

www.agmkt.state.ny.us/FS/industry/shelleggs.html

New York State Department of Agriculture & Markets Food Labeling Regulations:

www.agmkt.state.ny.us/FS/pdfs/FSI514.pdf

Shared Wisdom: Selling Your Best at Farmers Markets DVD available at Extension Offices throughout NYS

6. ADDITIONAL CONSIDERATIONS: TRACEABILITY

One of the concerns of the FDA in food borne illness outbreaks is the ability to trace the tainted food back to the source of contamination. Farmers should make every effort to identify their CSA, as well as their product, allowing consumers to track where their food comes from and what batches are delivered on what day. This can be done with a paper system or with a more sophisticated electronic system.

A traceability system allows each farm to identify their products and logistics, such as how they were grown, harvested, packed and transported. A Harvest Log can be maintained to show all relevant information to help trace the products, should an illness occur.

RECOMMENDATION: A product log for each delivery should identify fields, harvest dates, harvest crew(s) and dates and location food was distributed to.

While many of the direct delivery programs only offer product produced on the farm, it is becoming more common for direct delivery farmers to include food from other local farmers. For example, a farm producing vegetables may partner with a fruit producer so each of their delivery customers can purchase fruits and vegetables each week. Labeling foods from another farm could be as easy as stickers on the bag or container, or other such means to notify consumers.

RECOMMENDATION: All direct delivery programs should include farm signage that identifies the name of the farm, the location and contact information.

RECOMMENDATION: Any product offered that is sourced off-farm, should be identified to the consumer.



Farmers should also consider other ways they can keep their farm name in front of customers, such as signage that includes the farm name, farm brochures, business cards and name tags on clothing.

Finally, it is important that each farm have a plan in place to identify the logistics of their products; i.e. field harvested from, when the foods were harvested or produced, and the farm family member or employee who handled the foods. A Harvest Log can be maintained to show all relevant information to help trace the source should an illness occur.

RECOMMENDATION: A Harvest Log should be maintained for all products grown/ produced on the farm identifies the name of the farm, the location, contact information, and food they provided to the customer.

References:

Food Safety Begins on the Farm: Good Agricultural Practices for Fresh Fruits & Vegetables, www.gaps.cornell.edu/

Attachments:

Traceability Procedures

Harvest Log

Product Log

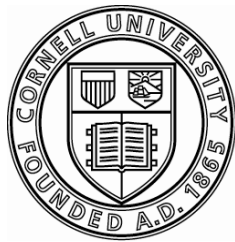


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