

FOOD SAFETY FOR FARMERS' MARKET VENDORS

Farmer's Markets are enjoying renewed popularity around the country. They provide an excellent opportunity for growers to sell their products for added income. It is crucial for Farmer's Market vendors to ensure the safety of the products they offer for sale. Foodborne illnesses have been linked with Farmer's Markets in the past. This publication is designed to help vendors understand what they can do from field-to-market to ensure the safety and quality of the products they sell. Selling clean, wholesome food is a primary part of creating and keeping customer confidence – food spoilage is a disaster that can undo all a producer's hard work and their hard-won reputation. If customers are unhappy with the products they purchase from a vendor's stand, they will not be back. Word-of-mouth advertisement from a bad experience may not be good for future business. Building sanitation and food safety into the vendor's routine is an essential component of success for both farmers and the future of Farmer's Markets.

There are four different kinds of products found at Colorado Farmer's Markets: **raw agricultural products, product samples, prepared foods** (e.g. chili roasters) and **processed foods**. Depending on the types of products, there are correlating food safety considerations and regulations:

Raw agricultural products & product samples: Farmer's Markets selling only uncut fresh fruit and vegetables are exempt from licensing requirements of the Colorado Retail Food Protection Act. Samples of these products may be offered to consumers by vendors that are not licensed as retail food establishments and, therefore are not required to comply with the provisions of the *Colorado Retail Food Establishment Rules and Regulations*. Unlicensed vendors, however, should follow the minimum sanitation guidelines to reduce the chance of foodborne illness caused by unsafe food samples – see "Preparing and Offering Food Samples to Consumers: A Guideline for Farmer's Markets." These sampling guidelines address the food safety concerns for otherwise whole fruits and vegetables sold at the Farmer's Market.

Prepared foods: Vendors that are preparing, packaging or serving food must be licensed as a retail food establishment (e.g. chili roasters require a retail food establishment license). The *Colorado Retail Food Establishment Rules and Regulations* have requirements for Temporary Food Service Establishments and Farmer's Markets and could be inspected by the Colorado Department of Public Health and Environment. Inspections are rare, but if complaints are made or if a reported illness results from food sold at a Farmer's Market, inspection and/or investigation may result.

Processed foods: All processed foods sold at Farmer's Markets must be manufactured in an approved facility. Approved facilities are inspected by the health department for compliance with the *Colorado Wholesale Food Regulations Current Good Manufacturing Practice*. Processed foods are foods that undergo slicing, dicing, cutting, chopping, cooking, mixing, grinding, smoking, drying, packaging, canning* or other procedures that alter the food from its original state. Mixed greens, honey and salsa are

examples of processed foods. Processed foods must also comply with federal and Colorado labeling regulations. Raw agricultural products sold in their raw harvested state are not considered processed.

*Canned foods are subject to even stricter restrictions and cannot be sold or distributed unless processed at an approved cannery.

Cleanliness and Sanitation: The Essential Ingredients

Sanitation is basic. At all stages in your food-handling process – preparation, storage, display and serving – you must make sure that all your work surfaces and your equipment are *both* clean *and* sanitary.

What's the difference?

Clean means free of visible dirt; *sanitary* means free of harmful levels of disease-causing microorganisms and other harmful contaminants. Any dish, counter or utensil must be clean before it can be sanitized.

How to handle produce?

Wash fruits and vegetables, unless washing would reduce their quality or increase spoilage, as with raspberries, potatoes and onions. In that case, remove visible dirt. Customers may consume the fruits and vegetables without washing them after purchase; therefore it's vitally important to sell them a safe product.

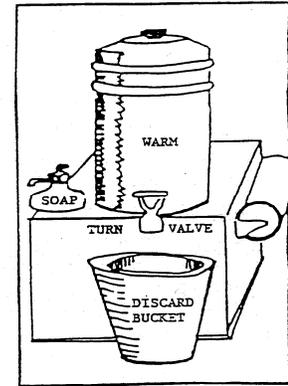
Sampling produce:

- ***Produce used for samples must be washed with cool water.*** If it is thick-skinned produce, scrub with a clean vegetable brush. This removes nearly all insects, dirt, bacteria and some pesticide residues that can contaminate the interior of the produce once it is cut.
- ***If washed produce is not cut for samples,*** immediately store it in a clean container to prevent re-soiling of the exterior surface prior to cutting.
- ***Cut samples must be covered*** or protected if flies are present, the area is dusty, or weather conditions are such that the samples could become contaminated.
- ***Minimize bare hand contact with cut produce.*** This can be done by using single service items (as described below). If single service gloves are used, change the gloves often to prevent soiled gloves from cross-contaminating samples. Remember to wash hands between changing gloves.
- ***Use single service items*** to distribute samples to customers. Examples are paper plates, cups, napkins, plastic utensils or toothpicks. The customer can then dispose of single service items once the product is consumed.

How to clean and sanitize equipment, surfaces...and your hands!

- ***Practice good hygiene.*** Hands must be properly washed when selling products at the Farmer's Market and when preparing and distributing samples. Hands must be washed after smoking, eating, drinking, using the restroom, or anytime contamination occurs.

- **Proper handwashing:** Wet hands with clean, warm water. Apply soap and work into a lather. Rub hands together for 20 seconds; clean under the nails and between fingers. Rinse under clean, running water. Dry hands with disposable paper towel.
- **Use clean and sanitized dishes,** knives, utensils and cutting boards for cutting and displaying produce. Wash with soapy water, rinse with clean water, sanitize and air dry.
- **To sanitize dishes,** knives, utensils and cutting boards: place the items in 75° F water (slightly cool to the touch) that has one tablespoon of regular, not scented chlorine bleach per gallon of water, for one minute, then allow to air dry.
- **When you're on the move,** consider constructing the portable system illustrated (adapted from *Growing for Market*, Lawrence, Kansas).



More Tips for Staying Trouble Free

- **Storing food safely, easily.** Store all food in food-grade containers or packing materials. Garbage bags are not food-grade – they're treated with mold-inhibiting chemicals. And don't reuse old bread sacks or grocery bags: These may have been contaminated by the food already stored in them.
- **Ensure that transportation vehicles are clean & sanitary.** Dirty vehicles can contaminate produce with harmful microbes.
- **Keep garbage containers covered,** and empty them often. It is recommended that each vendor supplying samples provide a small garbage can for used sampling containers or utensils.
- **Prevent creature contact** – don't let rodents, insects, birds, etc., get at your food. Netted table tents keep flies and bugs off; they're lightweight and come off easily when you need to serve or sell your product.
- **Keep raw and prepared foods separate.**
- **Ice should be made from potable water only.** Ice that has kept food cold should not be served for human consumption. Whenever possible, use cold packs to keep food cold – they're more economical, and your food won't get soggy. You can make your own cold packs from watertight containers.
- **Store chemicals,** including cleaning solutions, away from food.

Food Safety Begins on the Farm

Assuring the safety of the products vendors sell at the Farmer's Market begins long before food is available for purchase. It is essential that growers work to reduce exposure to contaminants and minimize the potential for bacterial growth during production, harvest and handling steps. Manure management, water source and usage, and farm worker health and hygiene are the three major factors that can contribute to the risk of produce contamination on the farm. By addressing these components before planting, during production, and throughout harvest and post-harvest handling, the risk of contamination can be minimized.

Potential growing sites for fruit and vegetable crops need to be evaluated regarding land-use history and previous manure applications. Produce fields should be separated from contact with livestock yards and pastures or water movements that may carry livestock waste to produce fields via runoff or drift. Upstream uses of surface and irrigation water should be assessed and tested for microbiological quality if questionable. Prior to planting, manure use must be evaluated to ensure proper and thorough composting, and timing of manure application and soil incorporation.

Side dressing crops with manure should be avoided or if this practice is undertaken, only well-composted or well-aged manure should be applied. Cross contamination from livestock areas via farm equipment can be reduced by cleaning tractors prior to entering produce fields and keeping animals, including poultry, pets, and wildlife (as much as possible) from roaming in crop areas.

During production, irrigation methods and water quality can either contribute to or minimize contamination risk. Irrigation water, municipal water, well water and surface water all need to be tested for microbial water quality. Water tests need to be evaluated and water sources filtered or chemically treated if necessary.

Throughout production, harvesting and post-harvest-handling, farm worker health and hygiene must be supported via convenient, clean, and well-maintained toilet and hand washing facilities. Farm worker training should emphasize the relationship between food safety and personal hygiene. Farm workers, who are sick, should not be assigned to duties that require direct contact with produce.

Minimizing food safety risks during harvest and post-harvest-handling include assuring clean and sanitary storage facilities, packing containers, harvesting and packing machinery, transportation vehicles and in general all surfaces that come in contact with produce. Wash water quality must also be evaluated to minimize the spread of pathogens to the produce. Never use re-circulated water to wash produce because it can inoculate the product with pathogens removed from previously washed produce.

Food safety risks and strategies to minimize contamination exist from farm to table and at each stage responsible food safety practices need to be implemented. For Farmer's Market vendors to truly be successful, food safety practices have to be utilized at all times.

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References for further information:

- 1) Food Safety Begins on the Farm: A Grower's Guide, Anusuya Rangarajan, Elizabeth A. Bihn, Robert B. Gravani, Donna L. Scott, and Marvin P. Pitts, 2000.
- 2) Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables, U.S. FDA, Center for Food Safety and Applied Nutrition (CFSAN), Oct. 1998
<http://www.fda.gov/>

