



Missouri Department of Health and Senior Services

P.O. Box 570, Jefferson City, MO 65102-0570 Phone: 573-751-6400 FAX: 573-751-6010
RELAY MISSOURI for Hearing and Speech Impaired 1-800-735-2966 VOICE 1-800-735-2466

Margaret T. Donnelly
Director



Jeremiah W. (Jay) Nixon
Governor

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TO: Regional EPHS V's
Local Public Health Administrators
Local Environmental Public Health Specialists

FROM: Mark Jenkerson, Interim Chief
Bureau of Environmental Health Services

SUBJECT: Farmer's Markets Guidelines

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Introduction

This Bulletin is being provided as guidance and clarification for environmental health staff that inspect farmer's markets. This bulletin provides information concerning the various food items that may be found for sale at farmer's markets throughout the state. If you have specific questions or concerns, please contact Ellen Dettman at (573) 751-6090 or your regional EPHS V.

There is an increasing demand for locally grown produce and healthier unprocessed foods; this increase has led to a substantial growth in the amount of food being sold at farmer's markets. As public health officials, we want to encourage and facilitate convenient access to these foods. We also recognize that these foods, like those sold in more traditional retail venues can present food safety risks if not handled properly. The concept of farmer's markets has also evolved in recent years. Formerly, they were a place for farmers to sell the fruits and vegetables they had raised locally. Today many farmer's markets resemble an outdoor bazaar with fruits, vegetables, prepared foods, arts and crafts and a wide variety of items offered for sale. Recently, we have received a number of questions asking for clarification about which food items can be sold at farmer's markets and the acceptable conditions or processes necessary to assure food safety for the public.

A key principle is state law (RSMo196.015) which prohibits the sale of adulterated food. This applies to food from approved inspected sources and food from exempt sources made in individual's homes. Another important consideration is some local jurisdictions have adopted local food safety ordinances that are more stringent than state standards. Some local ordinances require that all food sold to the public come from approved sources.

Fruits and Vegetables

If a vendor sells only unprocessed whole fruits and vegetables, in-shell nuts and other whole agricultural products, they do not meet the meaning of a food establishment, as defined in the food code. These vendors do not need to be under routine inspection by a health agency. This applies both

to the market where the goods are sold and to the farm where they are produced. However, these vendors should be encouraged to know, understand and apply “good agricultural practices” (GAP). An excellent free GAP guideline is available from Cornell University at <http://www.gaps.cornell.edu/FSBFEng.html>. The GAP guideline’s focus is to assure safe and unadulterated products through best practices and recommendations regarding the use of agricultural chemicals, manure as a fertilizer, and on-farm sanitation practices. Another online tool, part of FamilyFarmed.org's On-Farm Food Safety Project, was developed by a broad coalition of farm and produce industry partners. It is available at <http://www.onfarmfoodsafety.org/>.

Processing

An inspected and approved facility must be used if processing of fruits and vegetables occurs. Removing the outer husks from an ear of corn or the outer leaves from a head of cabbage or cutting the tops off of carrots or beets are not processing steps. Examples of processing include cutting corn kernels from the ear, slicing tomatoes, chopping lettuce and similar activities. If a vendor processes fruits and vegetables, proper food safety practices must be followed and the physical facility must have the basics of: hand washing sinks, warewashing sinks, mop sinks, shielded lights, etc.

Offering Samples

Often vendors want to give prospective customers a sample of their products. This may involve processing steps such as washing and cutting. Small items, such as blueberries or strawberries, should be washed before being given as samples. Larger items like peaches, cantaloupe or watermelon must be washed and cut in order to offer a small portion as a sample. This may be done off site at an approved and inspected location, or it may be performed on site if the vendor has hand washing facilities and an approved facility to wash, rinse, and sanitize the utensils and cutting board. Accommodations for washing the produce prior to processing are also needed. The sampling itself should be done in a sanitary manner using toothpicks or individual cups to dispense the food. The public should never reach into a bulk container to get a sample. Fruits or vegetables that meet the definition of potentially hazardous food must be kept at proper temperature or the vendor must use a process where time is used as the public health control.

As part of the stand inspection, the inspector will need to determine where these products are processed and assure that the foods are presented for sampling or on display safely.

Meat, Poultry, Eggs, Milk and Other Dairy Products

Beef, Pork and Other USDA Amenable Species

The livestock must be slaughtered and processed under United States Department of Agriculture (USDA) or Missouri Department of Agriculture (MDA) inspection. Each individual package of meat is required to have a mark of inspection from USDA or MDA. Meat labeled “not for sale” may not be sold at a farmer’s market.

The inspector must assure that meat offered at the farmer’s market is kept at proper temperature. In an effort to assure proper temperatures, many local jurisdictions will only allow meat sold at a farmer’s market to be held frozen in a freezer, while others will allow the frozen product to be kept in a cooler with ice. The inspector should assure that the meat is stored or displayed in a manner that is safe and sanitary and that cross-contamination or adulteration will not occur.

Poultry and Rabbits

The federal poultry law exempts producers who slaughter fewer than 1,000 birds a year from USDA inspection. The Missouri meat inspection law was changed in 2006, to allow rabbit producers to slaughter up to 1,000 rabbits per year without inspection. At farmer's markets producers who fall under these exemptions may sell these products. These products may not be adulterated and must be kept at proper temperature until sold.

Wild Game

Wild game may not be offered for sale at a farmer's market. "Wild game" meat, whether the meat is from deer, elk, turkey, etc.; must be from an animal that was commercially raised for food. It must be slaughtered and processed under USDA or MDA inspection. These products must be unadulterated and kept at proper temperature until sold.

Unpasteurized Dairy Products

The state milk law allows a producer to sell unpasteurized (raw) milk at their farm or to deliver it directly to a customer; this includes unregulated and ungraded milk. Unpasteurized milk cannot be sold in retail food establishments; therefore unpasteurized milk cannot be sold at a farmer's market.

The above raw milk discussion applies to fluid milk and cream. Other dairy products including; cheese, yogurt, cottage cheese, butter, sour cream and the like must be produced in facilities licensed and regulated by the State Milk Board. Packaging of these items must be intact and they must be held at a temperature below 45°F.

Eggs

Vendors selling eggs at farmer's markets must have the proper egg licenses from the MDA. The vendor must have a retailer's license and a dealer's license. Specifics about licensing and fees can be found at: <http://mda.mo.gov/weights/device/egglic.php>.

The inspector should determine that the vendor possesses the required licenses. The eggs should appear to be clean, and egg cartons should have the name and address of the producer. Eggs must be held at a temperature below 45°F at the farmer's market.

Sale of Manufactured Foods

Approved Sources

Non-potentially hazardous foods manufactured in approved, inspected facilities may be sold at a farmer's market. This would include food from small Missouri manufacturers but would also allow someone to retail Oreo® cookies, jars of Vlasic® pickles, cans of Star Kist® Tuna, etc. Although not common and not typical of a farmer's market, from a regulatory standpoint, if only prepackaged non-potentially hazardous foods are sold they are not a food establishment and would not be subject to routine inspection.

Jams/ Jellies/Honey

In general, these products are considered to be a low risk food product because they have both low pH and low water activity which inhibits the growth of microorganisms. In 2005, RSMo 261.241 became state law. It allows manufacturers of jams, jellies, and honey that produce less than \$30,000 per year to process these products in their home kitchens. The product must be sold by the manufacturer directly to the end consumer, and it must comply with the labeling requirements found in the food code: name and address of the person manufacturing the food; common name of the food; name of all ingredients in the food; and statement that the product has not been inspected by the Department of Health and Senior Services.

In addition, at the point of sale, there must be a placard that says "This product has not been inspected by the Department of Health and Senior Services." The inspector is responsible for determining that the vendor has displayed the placard, and the product is labeled appropriately. Honey should be labeled to discourage feeding to infants under twelve months old. If the inspector suspects that sales may exceed the \$30,000 per year, the vendor is required to have records of the sales available upon request.

Sugar free jams and jellies are an exception. Typically, jams and jellies have enough sugar content to bind the available water that supports bacterial growth. If fruit with a pH above 4.0 and artificial sweeteners are used then *Clostridium botulinum* growth is a potential hazard. These products should be labeled "no sugar added". They should never be labeled "sugar free" because the fruit has natural sugars present. Products that contain artificial sweeteners in the finished product need to be sent to a laboratory and have the pH tested. Since there are not large quantities of sugar in these products to bind water and lower the amount of water available for bacterial growth, pH is the only barrier against microbial growth.

- Jam or jelly with a final pH below 4.0 should still be allowed to be made in home kitchens under the statutory exemption. The manufacturer should be told they must always follow the recipe or formulation used in the tested sample. Even a slight change in formulation would require re-testing.
- "No sugar added" jelly that has a pH between 4.0 and 4.6 it should be made in an inspected or regulated facility. The pH should be tested on every batch with a quality pH meter and a log kept of the results.
- "No sugar added" jelly with a pH above 4.6 should not be allowed under any circumstances.

Jellies made with juices should also be tested. If the pH is below 4.0 we will consider that the primary control point and allow them to proceed. If the pH is above 4.0, water activity becomes the primary control point and the water activity of the jelly must be tested in a laboratory. If the water activity is below .80, allow the jelly to be made under the food code exemption. For both of the above methods the processor should be warned not to change the formulation or process. If the water activity is between .80 and .85 it must be manufactured in a regulated facility and the water activity monitored.

Baked Goods

Shortly after the passage of RSMo 261.24, the Department revised the definition of a food establishment to allow individuals to make other kinds of non-potentially hazardous foods in their

home kitchens and sell them to the public. These foods include breads, cookies, fruit pies, cracked nuts and similar foods. There are specific requirements for the manufacture and sale of these foods. The inspector must be familiar with the definition of “food establishment” found in the food code; specifically 31.c(viii).

During the inspection the inspector must determine that the vendor is the manufacturer or an immediate family member and that the food is sold to the end user. The inspector must also assure that the food bears a label stating the name and address of the manufacturer/processor preparing the food, common name of the food, name of all the ingredients in the food and a statement that the product is prepared in a kitchen that is not subject to inspection by the Department of Health and Senior Services. The inspector will assure that the consumer is informed by a clearly visible placard at the sales or service location that the food is prepared in a kitchen that is not subject to inspection by the Department of Health and Senior Services.

Pickles, Salsa, Sauces, and other Acidified Foods

An acidified food is a food with a relatively neutral pH and an acid is added to lower the pH below 4.6. The purpose of acidification is preservation of the food, and the public health benefit is the prevention the outgrowth of *Clostridium botulinum* spores. If not properly prepared, the *C. botulinum* can grow and produce botulism toxin. If consumed, this can result in severe illness or death. To that end, there are federal regulations for the manufacture of acidified foods. The manufacturer must submit their recipe and procedures to a process authority, and if needed, attend a “better process control school”. In addition, the manufacturer must assure the safety of the food produced by testing the pH of each batch of product and maintain records. All acidified foods must be manufactured in approved inspected facilities and comply with labeling regulations.

When acidified foods are found at a farmer’s market, the inspector should inquire in general terms about the recipe and the procedures in an effort to determine if a review was done by a process authority and if the manufacturer has attended process control training. The inspector should also assure that the product is stored and displayed properly, and the product is labeled according to the food code. These products will be processed off site so an inspection by the regulatory agency is necessary.

Sale of Live Animals

Markets that permit the sale of pets and farm animals must implement control measures to prevent the contamination of food products by those animals. A minimum distance of fifty (50) feet between animals and food is recommended for all farmer’s markets. If excessive flies or other pests are present, additional control measures may be needed to minimize their presence.

The inspector should discuss transportation of food products when they note that vendors are selling both foods and live animals. Cross-contamination of food products is easily prevented if the proper precautions are utilized.

At events where live animals are available, the inspector may use this as an opportunity to promote hand washing. If there is a primary point of contact or a sponsor for the farmer’s market, it would be beneficial to encourage them to consider portable hand washing stations. Offering customers and vendors the ability to wash their hands promotes good hygiene and public health.

Foodservice Operations

Some farmer's markets allow food vendors to sell prepared foods. While these may not meet the food code definition of "temporary food event" (fourteen days or less in conjunction with an event) they do meet the definition of a "food establishment." Therefore they must have: the ability to protect food from environmental contaminants and pests, and they must have hot and cold running water, hand washing facilities, a three compartment sink, capability for hot and cold holding (if applicable), a safe and adequate water supply, sanitary wastewater disposal and convenient access to a toilet. Normally, these are not permanent fixed facilities, so a smoker/grill would require overhead protection but not a screened enclosure.

Duties of DHSS Staff

1. Assess needs and develop guidelines for farmer's markets and the food products for both the LPHA environmental staff and vendors at farmer's markets.
2. Provide technical assistance and training to LPHA environmental staff.
3. Act as a liaison between DHSS and other governmental agencies.
4. Assist LPHA environmental staff without ordinances with enforcement activities.
5. Inform Food Program Manager of any difficulties in obtaining compliance with safety and sanitation standards.

Common Responsibilities of LPHA

1. Provide technical assistance and guidance to market vendors, sponsors of farmer's markets, etc.
2. Develop a list of farmer's markets within their jurisdiction.
3. Inspect the farmer's markets at a frequency that supports the risk that the foods vended indicate. Conduct follow-up inspections, site visits, and/or enforcement actions when necessary.
4. Respond to consumer inquiries or complaints.
5. Contact the Regional V or Central Office program staff for assistance.

Resources

1. District V Contact Information
EPHS Tech Support Map found in Section 9.1 of the Environmental Health Operational Guidelines, or <http://health.mo.gov/atoz/ehog/index.php>.
2. Retail Food Program Contact Information
Ellen Dettman, Program Manager
(573) 751-6090
ellen.dettman@health.mo.gov
3. Food Manufacturing Program Contact Information
Russell Lilly, Program Manager
(417) 895-6917
russell.lilly@health.mo.gov