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Food Safety for Farmer's Market Vendors

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Factors that cause food-borne illnesses and recommendations for preparing and selling wholesome and safe food products at Farmer's Markets.

Farmer's Markets provide opportunities for producers to sell food products for added income. This food should be wholesome and safe. Vendors at Farmer's Markets are responsible for the safety of the products they offer for sale. If customers are unhappy with the products they purchase from a stand, they will not be back. Word of mouth advertisement from a bad experience may not be good for future business.

The Nebraska Food Service Code has regulations for Temporary Food Service Establishments providing that Farmer's Markets can be inspected by the Department of Agriculture or local health departments. 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.

Potentially hazardous foods should not be sold through a Farmer's Market. These include: meat and poultry; milk and milk products, including pastries with cream or custard fillings; and home-canned low-acid foods, such as vegetables and meats.

What food handling practices contribute to food-borne illnesses? If we look at the cause of food-borne illness outbreaks, we have some clues where microbial contamination can occur.

The ten most important factors contributing to food-borne illnesses in the United States are:

1. Improper Cooling.

Foodborne microorganisms grow best at temperatures between 41°F and 135°F. Foods left at room temperature for more than two hours provide the ideal conditions for microorganisms to multiply rapidly.

Hot food stored in large containers in refrigerators or freezers does not cool quickly. Microorganisms again have conditions which favor rapid growth. Store foods in small shallow containers. Refrigerate foods promptly.

2. Lapse of 12 or More Hours Between Preparation and Eating.

Microorganisms need time to grow and multiply. By reducing the amount of time between preparation and eating, you can reduce the chances of any microorganisms present growing to large numbers.

3. Colonized or Infected Persons Handling Foods.

Staphylococcus bacteria is found naturally on our bodies. If we have sores or pimples, these areas have higher numbers of this bacteria. Persons who are ill also have higher numbers of microorganisms that may lead to food-borne illnesses if they handle food.

4. Inadequate Reheating.

Cooked foods may become contaminated after heating. If these foods are not reheated to at least 165°F, microorganisms may not be destroyed.

5. Improper Hot Holding.

Temperatures below 135°F encourage the rapid growth of microorganisms in food.

6. Contaminated Raw Food or Ingredients.

Foods which come into contact with dirt and manure (eggs and produce grown with manure as a fertilizer) will contain a large number of microorganisms. Cracked eggs also are considered contaminated. Wash foods to remove dirt and manure.

7. Foods From Unsafe Sources.

Illnesses have been reported from eating fish or seafood obtained from unsafe water.

8. Improper Cleaning of Equipment and Utensils.

Food left on work surfaces, equipment and utensils helps microorganisms survive. When the equipment or utensil is used, microorganisms will be transferred to the food.

9. Cross Contamination From Raw to Cooked Foods.

Do not allow juices from raw meat and poultry to come in contact with cooked food. Raw fruits and vegetables also can contaminate cooked foods.

10. Inadequate Cooking.

Consuming undercooked meats and poultry has resulted in food-borne outbreaks. The most serious cases of food-borne illnesses due to inadequate cooking result from not properly processing home-canned low-acid foods. The spores of the botulinum microorganism can survive boiling water temperatures. Improperly canned low-acid foods may contain the deadly toxin that is produced when spores grow into bacteria and multiply.

Providing Safe Food

The food you prepare and offer for sale must be safe for the consumer. When customers spend money for food, they have the right to expect that it will be safe and wholesome.

Here are recommendations to help you prepare and sell safe food:

Preparation of Food

- 1. Wash hands often when handling food. If you have sores on your hands, use plastic gloves.
- 2. Do not allow persons who are ill to handle food.
- 3. Use clean dishes and utensils for food preparation.
- 4. Sanitize the work surfaces with which food may come in contact.
- 5. Shorten time between preparation and the sale of the item. Items should be made less than 12 hours before being sold.
- 6. Prepare several small batches of a baked item rather than making double and triple batches.
- 7. Store food in food grade containers or packaging materials. Garbage bags are treated with mold inhibitors and these chemicals are not food grade. Old bread sacks and grocery bags may be contaminated from food previously stored in these bags.
- Store foods at the proper temperature maintain your refrigerator at or below 41°F and freezer at or below 0°F.

Sale of Food

- 1. Keep sale area clean; sanitize surfaces.
- 2. Keep garbage containers covered; avoid accumulation of waste and debris.
- 3. Use utensils to handle food. If plastic gloves are used to handle food, remove them to handle money and other non-food items.
- 4. Keep raw food separated from prepared foods; wash fresh fruits and vegetables. If washing fruits (raspberries) or vegetables (potatoes, onions) reduces their quality or increases spoilage, remove visible dirt.
- 5. Protect foods from dust, sneezing and handling by customers. Use appropriate packaging or dust/sneeze guards.

- 6. Maintain proper temperatures. Keep cold foods, cold: 41°F or below. Keep hot foods, hot: 135°F or above. Protect food from condensation.
- 7. Prevent rodents, insects, birds, animals, etc., from having contact with food.
- 8. Store chemicals (cleaning solutions) away from food. Avoid using chemical insecticides to control insects.
- 9. Do not reuse disposable items such as plastic bags, plastic spoons, etc.
- 10. Label food with your name, address and any storage requirements.
- 11. Ice used to keep food cold should not be used for human consumption.

Sanitizers

Good housekeeping is important. Many types of cleaning and sanitizing solutions are available. Below are solutions made with chlorine bleach for washing dishes and cleaning food contact surfaces. Store chemicals away from food.

Washing Dishes:

1/2 tablespoon chlorine bleach per gallon of water.

Washing Food Contact Surfaces:

1 tablespoon chlorine bleach per gallon of water.

Resources

For more information, contact the Nebraska Department of Agriculture or local health departments (Lincoln-Lancaster, Douglas, Hall, and Adams).

Your local Extension office can provide publications on home food preservation and horticultural topics.

References

- Hazard Analysis Critical Control Point (HACCP) Systems for Retail Food and Restaurant Operations. J. Food Protect. 53:978, 1990.
- Food Service Code. Nebraska Department of Agriculture. 2007 Recommendations of the Food and Drug Administration.

UNL Extension publications are available online at *http://extension.unl.edu/publications*.

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