

Common Sense Food Safety Considerations for Farmers' Market Growers

Dr. Terry Kirkpatrick
Professor/Extension Plant Pathologist
UofA Research and Extension
Southwest Research and Extension Center
(870) 777-9702
tkirkpatrick@uaex.edu



Organically grown

Food grown or raised without the use of additives, coloring, synthetic chemicals (e.g., fertilizers, pesticides, hormones), radiation, or genetic manipulation and meeting criteria of the U.S.D.A. Standard National Organic Program.

- Just because you didn't spray the crop with a pesticide DOES NOT make it organically grown.
- Similarly, just because you sprayed the crop with a pesticide does not keep it from being organically grown: There are numerous naturally-occurring pesticides that are approved for organic production. The key is SYNTHETIC (manmade) pesticides - which are not approved for organic systems.



Certified Naturally Grown

Essentially the same as organically grown, although not inspected by the USDA. Generally CNG growers are inspected by third parties in the local area and "certified".

Naturally Grown, Sustainably Grown, etc.

Marketing strategies rather than farming systems.



Rather than try to fit into some mold, most vendors at a local level simply tell their customers what practices they use in growing the crop and let it go at that!

Integrated Pest Management The careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment.

GAP (Good Agricultural Practices)

A collection of principles for on-farm production and post-production processes that result in safe and healthy food and non-food agricultural products, while taking into account economic, social, and environmental sustainability.

GAP emphasizes minimizing food-borne pathogen contamination that might occur during production and handling of the produce (such areas as cleanliness of irrigation and wash water, sanitary facilities for workers, restricting raw manures from the crop, pesticide use, etc.). If you plan to sell fresh produce to large grocery chains (Wal-Mart, Brookshires, etc.), they will require that your farm be certified in GAP by a third party. This is not necessary currently for farmers markets and many privately-owned grocery stores.

CHECKLIST OF FOOD SAFETY CONSIDERATIONS for FARMERS' MARKET VENDORS

Irrigation

- Farm ponds should be "livestock free". Also try to keep other potential contamination sources to a minimum as well - wild birds (geese, ducks), runoff from agricultural or other waste areas).
- Wells have a lower probability of bacterial (water-borne pathogen) contamination than surface water sources, but it can happen (for example, a shallow well downhill from the barn lot or field lines of a septic tank).
- Springs should be covered and protected.
- Rivers/streams - difficult to control quality and introduction of contaminants.
- Drip/trickle irrigation is economical and water conservative; also minimizes contact of water with the produce.
- Overhead irrigation is the least water conservative and has the greatest potential of contaminating produce because the water comes in direct contact with the produce.
- Your best protection is to have your water source tested regularly (once a year). If in doubt, test the water more frequently and **maintain a record of the results**.

Fertilizer

- NEVER use raw manures as a fertilizer on growing crops.
- Apply and incorporate raw manure a **minimum of four months** before harvest.
- **Fully composted** manure may be applied to the crops or as a mulch during the season.
- Commercial fertilizers are precise, effective, and easy to apply; they are not acceptable in true organic or CNG operations, however.
- Soil testing services are free through the local county agent. Soil test regularly - especially if you are using manures or compost.

Pesticides

- Consider pesticide certification. You don't have to use pesticides, but in an emergency, when the army worms or grasshoppers are eating the crop, the ability to *legally* purchase and apply an effective insecticide could be a blessing!
- Follow label directions. The label is the law - if you do not follow it, you are breaking both Federal and state law. Just because you bought the product at Wal-Mart does not mean it is safe to apply to everything.
- Maintain accurate and complete records of any pesticide that is applied.
- When in doubt, ASK FOR HELP. **Your county agricultural agent is the best local resource available for pesticide questions.**

General Considerations

- Avoid off-target or unintended food safety effects. For example, don't put the manure pile uphill from the garden, or locate the garden downhill from the barn lot. Don't allow pesticides from spraying the pasture or other crops drift onto the vegetable/fruit crop.
- Restrict the access of poultry, pets, livestock, etc. in crop production sites. Keep the yard chickens out of the garden!
- Never allow spoiled or rotten produce to contact products you plan to sell.
- Disinfect coolers, baskets, containers, etc. frequently. Although it is corrosive and may speckle your clothes, a 10% solution of common household bleach can be a wonderful friend for disinfecting things!