

## **How to Keep Your Fruit Clean and Safe: Good Agricultural Practices for Berries**

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Envision the best berry you have ever tasted. It likely had good color, nice shape, and when you ate it, it was juicy and sweet with just the right amount of tangy acid to balance the sugar. Whether or not the berry was safe to eat or was contaminated by bacteria, viruses or parasites, likely never crossed your mind. That is the sensation all consumers and all your customers want to have, absolute enjoyment associated with eating fresh, tasty, and safe berries. Now ask yourself, do high quality, tasty berries grow themselves? As farmers, do you simply sit in your house 10 months out of the year watching TV, knitting, or resting waiting for a great harvest to present itself, than gleefully walk to the field to reap the harvest? The obvious answer to both of these questions is no. Now consider why any farmer would take food safety for granted without ever having considered the risks involved or effort needed to produce safe fruit. The production environment as well as some common practices used in the production of berries can introduce food safety risks and need to be understood in order to be controlled. There is no such thing as zero risk when the fruit is eaten raw as is the case with most berries, but there are steps that can be taken to limit and reduce risks.

The first step to understanding risks on your farm is to consider your production practices including land selection, soil amendments before and during production, water use including irrigation and protective spray mixing, containers used for picking and packing, and any person involved in production, packing, and distribution. There are other facets that can be considered such as the sanitation of transportation vehicles, coolers, and display stands as well as the presence of wild and domestic animals in the production fields. Does field location, inputs, or practices introduce any microbiological, chemical or physical risks? Is your field downhill and downwind from a large dairy operation where manure run-off could enter your field? Have you used river water to frost protect your berries in late May when fruit has already started to develop or may be close to harvest? Does hand washing have anything to do with berry production or operating a pick your own operation? These are just a few questions that can help you assess your operation. If it is unclear what types of risks field location, inputs, and practices might introduce, there are many ways learn about produce safety. Aside from attending the food safety session at the Northeast Vegetable and Berry Conference, you can visit several extension program websites including the National Good Agricultural Practices Program at Cornell University at [www.gaps.cornell.edu](http://www.gaps.cornell.edu) or the University of California, Davis, GAPs Program at <http://ucgaps.ucdavis.edu/>. There are many other Land-Grant University (LGU) sites that can be found by simply googling “GAPs” or “Good Agricultural Practices”. In addition to websites and educational materials found on these websites, many LGUs provide in-person GAPs trainings. During the 2011-12 winter, Cornell Cooperative Extension , New York State Department of Agriculture and Markets, and National GAPs Program personnel will offer four (5) two-day food safety trainings throughout New York State. These trainings include an in-depth consideration of risks during fresh produce production as well as time for each participant to develop and write their own unique farm food safety plan. The dates and locations of these trainings are posted at [www.gaps.cornell.edu](http://www.gaps.cornell.edu). Those unable to make a training but still interested in developing their own farm food safety plan can consult A Food Safety Plan (Template) for You at <http://safety.cfans.umn.edu/> available from the University of Minnesota.

Motivation to understand and implement food safety practices goes beyond the desire to grow, harvest and sell safe berries. Many wholesale fresh produce buyers require verification of food safety practices before they purchase fruits and vegetables from a supplier. Buyers require the farms to have a written food safety plan that has been implemented including record keeping sheets that document practices. They also require farms to have third party audits to verify the food safety plan and practices are in place and implemented properly. In addition to buyer requirements, the Food Safety Modernization Act requires the U.S. Food and Drug Administration (FDA) to develop a fresh produce regulation. The draft regulation is scheduled to be released in early 2012 and will focus on practices used during fresh fruit and vegetable production. Having a written and implemented farm food safety plan is not just good for the safety of the fresh produce you grow, but is also good for business with the ever increasing food safety pressure in the marketplace.

Lastly, there are many resources available to not just help you learn about GAPs but also implement and document them. A review of the websites above as well as others will help you locate record keeping sheets and other materials such as worker training videos (*Fruits, Vegetables, and Food Safety: Health and Hygiene on the Farm*). If you need help getting started, contact your local extension educator or knowledgeable farm consultant. The newly formed Produce Safety Alliance (PSA) is working on a nationwide curriculum to help farmers understand and implement GAPs as well as prepare for the upcoming FDA regulation. The PSA has working committees that are open to participation by all those interested in this issue and information can be found at [www.producesafetyalliance.cornell.edu](http://www.producesafetyalliance.cornell.edu). The PSA is particularly interested in having farmers participate in their working committees since farmers understand the most about production and the challenges involved in understanding and implementing GAPs.