



## UC DAVIS CENTER FOR PRODUCE SAFETY

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### Case Studies in Food Safety

*Fresh fruit and vegetable farmers recognize their responsibility to produce safe food. Many produce groups have developed proactive programs designed to protect public health. Below is a sampling of a number of these programs from throughout the produce industry. In addition, the industry has launched an effort to provide needed research in the area of produce food safety.*

**LEAFY GREENS.** In 2007, California leafy greens farmers came together under the California Leafy Greens Marketing Agreement in an unprecedented commitment to protect public health. The LGMA is a mechanism for verifying that farmers follow a set of science-based food safety practices for lettuce, spinach and other leafy greens. At the heart of the LGMA program is a mandatory government audit system that certifies member companies are following the LGMA food safety practices. The program operates with oversight from the California Department of Food and Agriculture and utilizes USDA trained and certified inspectors. Each member of the LGMA is audited by government inspectors on a regular and random basis at least four times per year. Because there is no mandatory law in place in California for food safety, membership in the LGMA is voluntary, but once a member signs on they are required to be in 100 percent compliance with all LGMA food safety practices. Members who fail to comply are decertified from the program and their names are made available to the public. Currently, the LGMA represents member companies who produce approximately 99 percent of all leafy greens produced in California. Since its inception, the program has conducted over 1,500 audits of leafy greens farms. It has become a model for other food safety programs. A similar organization now exists in Arizona and leafy greens farmers across the country are seeking implementation of a National Leafy Greens Marketing Agreement to cover leafy greens produced throughout the nation. For more information, please visit [www.caleafygreens.ca.gov](http://www.caleafygreens.ca.gov).

**TOMATOES.** Throughout the nation fresh tomato farmers have made great strides in organizing programs to ensure safety of their products. In California, an organization called the California Tomato Farmers was formed. This organization is a cooperative comprised of family-owned farming business committed to a higher standard for growing tomatoes. The organization represents farmers who produce 9 out every 10 field-grown tomatoes grown in the state. All California Tomato Farmers members are subjected to mandatory and regular audits conducted by United States Department of Agriculture inspectors to confirm compliance with food safety standards in tomato fields and packing facilities. In Florida, tomato farmers have turned to the state legislature to implement mandatory food safety regulations which require government inspection of tomato farms and packing facilities by Florida Department of Agriculture inspectors to ensure compliance with food safety practices for tomatoes. In both Florida and California, food safety practices are based on a comprehensive set of science-based standards developed by an inclusive group of industry food safety experts, scientists, retail and food service operators with review and input from government health agencies. The California and Florida programs are the foundation of a new preventative protocol for the entire

tomato supply chain. This is in recognition of the fact that risk is not limited to the grower. This concept is being embraced by a number of foodservice companies who are stepping up to establish improved systems for handling tomatoes at their operations. For more information about tomato food safety, visit [www.californiatomatofarmers.com](http://www.californiatomatofarmers.com) or the Florida Department of Agriculture website at [www.doacs.state.fl.us/fruits/Tomatoes.html](http://www.doacs.state.fl.us/fruits/Tomatoes.html).

**MELONS.** Following the request by the US Food and Drug Administration for high risk commodities to develop defined food safety guidelines, the United States melon industry was the first to comply by completing “Commodity Specific Guidelines for the Melon Supply Chain in 2005.” This document, which was developed by industry members from throughout the supply chain with assistance from food safety experts, has since been updated by the U.S. Food and Drug Administration and posted on its website for review. In California’s central valley, the fresh cantaloupe industry has taken significant steps in preventing contamination of melons in the field through investments in research and a Quality Assurance Program which requires each carton of cantaloupes have a government stamp bearing a code that can be used to trace product should it ever become involved in a foodborne illness outbreak. For more information on California cantaloupes, please visit the website of the California Melon Research Board at [www.cmr.org](http://www.cmr.org)

**GREEN ONIONS.** Last month, the green onion industry completed a comprehensive set of guidelines for green onion food safety. This new document, “Commodity Specific Food Safety Guidelines for the Production, Harvest, Post-Harvest and Value-Added Operations of Green Onions,” was developed through the work of a wide group of industry food safety experts and university scientists with input from government agencies including FDA and USDA. The project was funded by the California Department of Food and Agriculture’s Specialty Block Grant program under the direction of Western Growers Association. The document and additional information can be found at [www.wga.com/foodsafety](http://www.wga.com/foodsafety).

**CENTER FOR PRODUCE SAFETY.** In 2007, the produce industry came together to form a unique program designed to provide ready-to-use, science-based solutions that prevent or minimize fresh produce food safety vulnerabilities. Initial funding for CPS was provided by the California Department of Food and Agriculture, the University of California, the Produce Marketing Association and Taylor Farms. To date, CPS has invested over \$3.8 million and there are 24 targeted research projects in progress. In addition, the center has collaborations with more than two dozen public and private partners to identify priorities and fund research. The goal of CPS is to facilitate new research, become a repository of global research and provide communication, outreach and training for industry, researchers and regulators. CPS recently announced it will provide an additional \$3 million in public and private funding to support both general and commodity-specific research related to produce safety. On June 23 CPS will hold a Produce Research Symposium in Davis, CA to review 11 CPS-funded research projects and discuss practical implications of findings. For more information on the Center for Produce Safety visit: <http://cps.ucdavis.edu>