

# THE PRODUCE NEWS

COVERING FRESH PRODUCE AROUND THE GLOBE SINCE 1897

## **Purfresh touts results of effectiveness study**

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Fremont, CA-based Purfresh, a provider of technologies that purify, protect and preserve food and water, announced May 10 results of recent third-party research that demonstrate ozone's applicability and effectiveness as a tool to improve the safety of fresh food.

The results, from research commissioned by Purfresh and conducted by The National Food Lab, demonstrated that controlled supplementation of ozone, an active form of oxygen, into transportation container conditions was able to kill and control the spread of Salmonella by more than 99.997 percent, Listeria monocytogenes by more than 99.999 percent and E. coli O157:H7 by as much as 99.9 percent. The results were on both actual fruit and container surface coupons and represent the efficacy of using ozone during transport, which is often the longest segment of the supply chain, to actively reduce food-safety risks.

"Countless studies have proven ozone controls bacteria, molds, yeast, viruses and ethylene," Dee M. Graham, president of R&D Enterprises, said in a May 10 press release. "I believe this study was unique because it showed that ozone is also highly effective at killing harmful bacteria in conditions similar to those found in refrigerated shipping containers."

An estimated 70 million tons of perishables were transported in refrigerated containers last year. During transport, with transit times ranging from seven to 50 days, harmful micro-organisms can multiply rapidly, putting the food at risk for contamination and spoilage. Purfresh addresses these risks with its ozone-based "Purfresh Transport" solution, an active cargo protection system that has been scientifically engineered to use ozone, a natural, residue-free form of oxygen, to control ripening, reduce decay and enhance the safety of fresh produce during transport.

"Given the continued expansion of the global food market and the ever-increasing reports of food related illnesses, it is exciting and encouraging to see innovative companies like Purfresh applying sound science and commercially viable solutions to this important industry challenge," Paul A. Hall, president of AIV Microbiology & Food Safety Consultants LLC, said in the release. "And I believe they really hit a home run with their transport solution by providing a way to enhance food safety as well as maintain the quality and value of fresh produce being shipped around the world without the dependency of many harsh, traditional chemicals that are rapidly falling out of favor in the world's markets."

"At Purfresh, we are focused on meeting the needs of the global food industry by providing innovative solutions that are science-based, easy to use and integrate with existing processes and infrastructure," David Cope, president and chief executive officer of Purfresh Inc., said in the release. "Unmatched by any other cargo protection system in the industry, our 'Purfresh Transport' solution uniquely takes advantage of the clean, powerful properties of active forms of

oxygen to help extend shelf life, minimize losses, maintain quality and enhance the safety of fresh produce all the way to market."

Available for use on new and existing refrigerated shipping containers, the patent-pending "Purfresh Transport" system simply "snaps" into a fan port to integrate with a container's refrigeration system. Leveraging the existing airflow system, the "Purfresh Transport" technology delivers precise, low- dose levels of ozone throughout the container, treating the air and surfaces to reduce harmful microorganisms that may lead to both disease and decay. The system actively monitors and adjusts the required ozone levels throughout the voyage based on changes in the condition of the cargo or the atmosphere.

Purfresh Transport is available through most major ocean carriers and is offered as a per-trip service.