

***Title: Understanding Your Ingredients and Where They Come From***

***Authors Name, Affiliation: Joy Waite-Cusic, Jovana Kovacevic, and Sheri Cole, Department of Food Science and Technology, Oregon State University***

In June 2005, four people in Minnesota became ill from eating food that was contaminated with a rare *Salmonella* strain. The state department of health began their outbreak investigation with the normal questions: “Where did you eat?”, “What did you eat?,” and “Did you eat any of these things?”. All four people had recently visited one of two locations of a national ice cream retail shop and all four had eaten the same flavor of ice cream: cake batter. As the investigation expanded, a total of 25 people in 9 states were confirmed to be infected with the same *Salmonella* strain over a period of 6 weeks. All had eaten cake batter ice cream from the same retail chain. What is special about cake batter ice cream?

This cake batter ice cream was made using a prepackaged yellow cake mix that included spray-dried egg whites and flour, among other “low risk” ingredients like sugar, salt, etc. The cake mix was simply blended in with a standard ice cream base, with no additional processing steps, and then frozen to create the new flavor. While the resulting ice cream may be delicious, a standard cake mix is not considered ready-to-eat – it was designed to be made into a complete cake batter and baked. This new and unintended use of the cake mix led to consumer illnesses linked to the ice cream retailer.

What can we apply from this outbreak?

- 1) Innovation is an important component of your business strategy; however, any new ingredients should be evaluated for the hazards that they might introduce into your product.
- 2) If you want to introduce new ingredients to your products and process, think about how the ingredient is *typically* used, how your usage is *different* and what that could mean for food safety.
- 3) Develop a relationship with your supplier to benefit from their food safety knowledge and find an acceptable strategy to minimize risk.
- 4) Implement a Supplier Control Plan. Download a [Supplier Controls Packet](#) for guidance on keeping your supply chain safe, standard documentation, and what questions to ask. Visit [Supply Chain Controls | U.S. Dairy](#)

[usdairy.com](http://usdairy.com) for additional templates, risk assessment tools and upcoming workshops.