### October 2004

# Commentary

## Thoughts on science education

# Educating the Public on Food Safety

In 1993, the Pacific Northwest witnessed an outbreak of the pathogen *Escherichia coli (E. coli)* 0157:H7 from undercooked, contaminated hamburgers served at Seattle-area Jack in the Box fast-food restaurants (Golan et al. 2004). This foodborne illness outbreak was significant due to the age of those it affected and the number of individuals who fell ill. The *E. coli* pathogen made close to 500 people sick. The median age of patients was 7.5 years (CDC 1993). Three children died as a result of the *E. coli* outbreak, including my 17-month-old son Riley.

During the outbreak, my wife and I learned about *E. coli* and took proper measures to protect our 9-year-old son from exposure to the pathogen. At the time, we never considered that our 17-month-old could be exposed to it because he was too young to eat foods such as hamburger. But *E. coli* can be spread in other ways, and Riley was one of numerous children who became ill as a result of secondary, or "person-to-person," cross-contamination infection. He contracted the pathogen at his day care facility from another child whose mother was an assistant manager at a Jack in the Box.

Riley soon showed symptoms of bloody diarrhea, which resulted in him being airlifted to the Children's Hospital and Regional Medical Center in Seattle. Riley's admittance into Children's Hospital was quickly followed by exploratory surgery and most of his colon was removed. He was then placed in a medically induced coma. With damage to most vital organs and severe brain damage due to a lack of oxygen in the blood supply to his brain, Riley died less than a month after he became ill.

The January 1993 outbreak was big news throughout the United States, and the media hounded my family, largely because we had carefully studied all aspects of our son's illness. We dealt with our pain by speaking up for change and for consumer education on the importance of food safety. In the weeks leading up to Riley's death on February 20, 1993, we talked about our son several times on national television. We even participated in a live televised program with President Bill Clinton and made our case for improvements in healthcare, meat inspection standards, and consumer education.

One month after Riley's death, my wife and I traveled to Washington, D.C., for meetings with Vice President Al Gore and United States Department of Agriculture (USDA) Secretary Mike Espy. The meetings, along with supportive pressure from consumer organizations, resulted in a commitment from the administration to require safe handling instructions on raw meat packages. We also worked with Secretary Espy to convince legislators and the Federal Register to mandate safe food-handling labels. By August 1993, the government had ordered that all raw or partially cooked meat and poultry sold in the United States after October 15, 1993, had to be labeled with safe-handling instructions and this labeling has been mandatory ever since. The USDA launched a public awareness campaign. My wife and I worked with the USDA as volunteer consultants and representatives to improve the accuracy of *E. coli* reporting by every state and to promote food safety education.

My wife and I decided that the most important thing we could do for our son was to commit time and energy to help develop policies, regulations, and educational programs about *E. coli*. As a high school science teacher I make sure that my students are educated on food safety and I encourage other teachers to do the same. I was one of 50 teachers from across the country to participate in the NSTA/FDA Professional Development in Food Science Program in 2003. While this opportunity has enriched my science curriculum, I was personally touched by the fact that many of the participants knew about my son. I truly believe that the best way to honor the life of my son is to work to help others. What I will never have the opportunity to teach him, I can teach others.

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## References

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