

Policy Pennings by Dr. Daryll E. Ray

Irradiation of high-risk foods: Has its time come?

Ground beef recalls this year have reached 29 million pounds in 2007 and there are still two months to go. The size of companies involved in the recalls due to *E. coli* O157:H7 have ranged from small local firms with local or regional distribution systems to large firms like Topps Meat Company and Cargill Meat Solutions.

From time to time we have written columns about food-borne illnesses and food recalls. This latest round of *E. coli* contaminated meat has come close to home as we have listened to local news stories about three children whose hospitalization has been linked by the Knox County Tennessee Health Department to the ground beef recall. In a fourth case that has not been linked to the other three cases, a toddler died of as the result of *E. coli*.

The Centers for Disease Control and Prevention (CDC), using a 1999 study, estimates that *E. coli* O157:H7 is responsible for “73,000 cases of infection and 61 deaths occur in the United States each year.”

If this level of illness and death were to be caused by a medicine, we would expect to see an immediate withdrawal of the product from the market.

It seems to us that tackling a problem like this requires a combination of private and public policy so that we don’t continue to see children put on dialysis machines because of what they ate.

The most immediate thing a consumer can do is to make sure that all of the hamburger that they serve is cooked to a minimum of 160 degrees F and that they observe sanitary precautions in the handling of meat and meat products.

On a recent trip, one of us ordered a hamburger at a major restaurant chain—the cooking instructions was “medium.” When the hamburger arrived at the table it was not just pink inside, it was raw. Being polite, we went ahead and ate the burger.

According to the CDC “If you are served an undercooked hamburger or other ground beef product in a restaurant, send it back for further cooking. You may want to ask for a new bun and a clean plate, too.” Given the level of recent recalls, that advice takes on a new level of

importance because, like others, we had grown complacent about food-borne illnesses.

We also need to look at the meat inspection procedures that are in place and see if there are areas that need to be tightened up. Both consumers and processors have an interest in making sure that the food processing system operates at the highest level of standards. For consumers it may be a matter of life and death and for companies it can mean added costs for the recall and even bankruptcy.

The problem is that despite all the inspections and food cooking and handling recommendations, *E. coli* and other food-borne illnesses like listeria and salmonella continue to be a problem.

The one public policy that is currently off-the-table is the irradiation of all ground meat products. At the same time, irradiation of all ground meat products could significantly reduce the level of food-borne illnesses, especially when coupled with the maintenance of stringent sanitation procedures at processing plants and proper meat handling procedures in restaurants and at home.

The Food and Drug Administration has determined that irradiation is safe and effective in decreasing or eliminating harmful bacteria. But many oppose irradiation because of its connection to the nuclear industry and concerns about the potential for irradiation to negatively change the food it is used to treat. There are also concerns among those that want their food as natural as possible with minimal processing of any kind. And then there is the cost issue.

From a public policy perspective, those considerations need to be weighed against the ongoing level of illnesses and deaths caused by food-borne pathogens that can be significantly reduced by the use of irradiation, especially by firms that process the largest quantities of meat and other high-risk products.

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