

Food irradiation may start to take off

It's the way to go for an educated society.

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The process, which can kill most bacteria in ground beef and poultry, is still not a widespread food treatment.

Last year, more than 10,000 people in America died because the food they ate was contaminated.

And more than 75 million Americans will miss at least one day of school or work this year because of contaminated food.

These statistics concern Ron Eustice, executive director of the Minnesota Beef Council, and researchers at Kansas State University, Iowa State University and Arkansas State University, who make up the national Food Safety Consortium.

That's because they know the technology to virtually wipe out bacterial contamination -- irradiation -- has been around since the 1960s.

It has been approved by the Food and Drug Administration, the U.S. Department of Agriculture and the Centers for Disease Control and Prevention.

But it is rarely used to treat the nation's mainstream food supply. That includes ground beef, the primary culprit in E. coli O157:H7 infections, and poultry, the primary source of salmonella.

"It's an absolute shame it's not used," Eustice said. "It would save human suffering, protect human lives and significantly reduce the risk of liability."

Not widespread for food

Irradiation is widely used to treat medical instruments and devices and to prolong the shelf life of some fruits and vegetables.

It was poised to become a major player in the sterilization of ground beef and other meats until the primary provider of food irradiation services, Surebeam, went bankrupt in 2004.

The major suppliers of ground beef -- Cargill, Tyson and ConAgra -- all had pilot programs with Surebeam. Smaller companies, including Omaha Steaks and Schwan's Fine Foods, also used Surebeam.

Omaha Steaks and Schwan's continue to irradiate all of their ground beef at other facilities. But they are the exception.

More than three years after the USDA approved the use of irradiated food in the school lunch program, a survey conducted by the Food Safety Consortium found 95 percent of school food service directors weren't serving it because their distributors don't offer it.

The Wichita school district does not use irradiated ground beef.

Vicki Hoffman, food services director for USD 259, said the district receives most of its food already cooked, including many poultry products and ground beef.

"We don't handle raw ground beef at all," she said.

The Food Safety Consortium was also disturbed by a response from food service directors who said they thought parents would be concerned if irradiated food was on the menu.

That concern is a reflection of a lack of public knowledge about the process, researchers say. Irradiation uses energy waves -- not radiation -- to kill bacteria.

Sean Fox, a researcher at K-State, conducted a survey two years ago that showed consumer acceptance of irradiation was tied to how much they knew about the process. Those who were given little information tended to be fearful, while those given a brochure with answers to common questions supported it.

Gaining traction

Researchers who support irradiation say use of the process may increase because of some recent developments.

Sadex, a Texas-based investment firm, purchased the assets of the defunct Surebeam Corp. in June 2005 and began updates on its Iowa irradiation plant. In late December, the plant began processing about 40,000 pounds per day of animal feed for mills in the Midwest.

David A. Corbin, a former Surebeam investor, is manager of the plant. Surebeam technology exposes food to an electron beam for a few seconds. Other irradiation technologies expose food to energy waves from Cobalt-60 or X-rays.

Corbin hopes Sadex will resume processing ground beef and other food products for many of the same companies that once used Surebeam, including Wichita-based Cargill Meat Solutions.

Cargill spokesman Mark Klein said the company is still interested in irradiation technology.

"Our retailers told us there was a very loyal customer base for the product," Klein said. "If it becomes economically feasible, we will likely resume our pilot project and offer it again."

The demise of Surebeam left only one other primarily food irradiation plant: Food Technologies in Mulberry, Fla., which mostly treats strawberries.

Detractors remain

Some consumer groups, including Public Citizen, insist that irradiation reduces the nutritional quality of the food treated. They also contend that the process provides the food industry an incentive to sidestep cleanliness procedures and sell contaminated food.

Studies by government agencies, however, maintain nutrition is not affected. While the food industry has made major gains in reducing bacteria through packing and

processing efforts, some still remain. The goal of irradiation is to eliminate the remaining bacteria, researchers say.

"It's impossible for packing operations to be clean enough to kill every bacteria," Eustice said.

Corbin, the plant manager, expects the future of irradiation to include many food products in addition to ground beef and poultry.

In particular, he sees it as a substitute for the chemical fumigant methyl bromide, which is being phased out by the Environmental Protection Agency because of the health and environmental dangers it poses.

"As we see more and more phasing out of chemical fumigants, we think the demand" for irradiation will grow, he said.