

Food Irradiation

Expensive, Ineffective, and Impractical – Not the Solution to Foodborne Illness

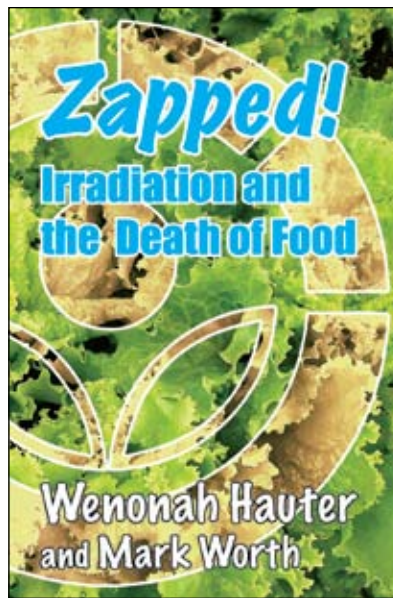
Every time there is a new recall of tainted food, irradiation companies and their proponents in government call for further centralizing our food distribution system and running all of our meat and produce through multimillion-dollar irradiation facilities. Food & Water Watch Executive Director Wenonah Hauter’s new book, *Zapped! Irradiation and the Death of Food* chronicles the rise of irradiation in the food industry – and its far-reaching consequences for human health.

Despite years of promotion from both industry and regulators, Americans have expressed their dislike and distrust of irradiated foods for more than 40 years, since FDA first legalized irradiated wheat in 1963. Numerous test-marketing efforts have failed, including irradiated ground beef from 2000 to 2004 and various irradiated fruits in the late 1980s and early 1990s.

Despite the argument by proponents that the safety of irradiation has been studied for over fifty years, many questions still remain about the long-term health effects of consuming a steady diet of irradiated foods. There are no studies to show that, over the long-term, eating irradiated foods is safe. Add in the nutritional damage irradiation can do to some foods and we believe it is far too soon to allow large portions of the food supply to be irradiated.

So far, Americans have eaten very little irradiated food. But in addition to eliminating the irradiation label, FDA is considering allowing irradiation of ready-to-eat foods such as hot dogs, deli meats, and bagged salads – a category of foods that make up a significant percentage of many people’s diets.

The Food and Drug Administration is considering a rule change that would deprive consumers of accurate information about irradiation. Their proposal to change the rules for labeling irradiated food would allow it to be



labeled as “pasteurized” in some cases, and in other cases to be sold without any labeling at all. With this proposal, the agency is ignoring overwhelming public input in support of clear and mandatory labeling of irradiated foods.

That 5,000 people in the United States die every year from foodborne illnesses is tragic. Food producers need to address the source of the problem – too-fast processing lines, too-long distances for food to travel, and dirty conditions at plants – not promote an expensive, impractical and ineffective technology like irradiation.

Background

Irradiation is Expensive

Irradiating the U.S. food supply would be extraordinarily expensive. In order to effectively irradiate the 8 billion pounds of hamburger that Americans eat every year, we would have to build approximately 80 multimillion dollar irradiation facilities. Further, irradiating the entire U.S. food supply would mean building thousands of plants. The costs of these facilities and the costs of transporting and handling irradiated food would be passed on to consumers. While the U.S. Department of Agriculture has estimated that irradiated ground beef should cost an additional 13 cents to 20 cents per pound, surveys of supermarkets reveal an additional cost of 50 cents to one dollar per pound for irradiated ground beef products.

Irradiation is Ineffective

Irradiation does not kill all the bacteria in food and may undermine other food safety efforts by masking filthy conditions and encouraging improper handling. In 2007, Food & Water Watch complained to the USDA that Wegmans supermarkets improperly encouraged consumers to undercook irradiated meat in their “Some Like It Pink” press release.

“While irradiation may reduce the numbers of bacteria present in raw product, the technology does not necessarily render it commercially sterile . . . Therefore, FSIS advises consumers that all raw ground beef, including raw ground beef that has been irradiated, should be cooked to a minimum of 160 degrees Fahrenheit,” wrote the USDA Food Safety and Inspection Services in a letter about Wegmans to Food & Water Watch.

Irradiation can be used to obscure poor sanitation in today’s mega-sized livestock slaughterhouses and food processing plants. Slaughterhouses process up to 400 cows per hour or 200 birds per minute, posing an enormous sanitation challenge where *E. coli*, *Salmonella* and other potentially deadly food-borne pathogens can be spread through feces, urine and pus. Instead of encouraging expensive treatments like irradiation, USDA should give meat inspectors the tools to test products at the plant and ensure that contaminated meat never reaches restaurants or supermarket shelves.

Infected manure from a nearby beef cattle ranch was blamed for the *E. coli* spinach outbreak in California. In response, testing of water used for irrigation and washing should be improved, vegetable processing plants should be inspected more thoroughly, large livestock operations operating near cropland should be more tightly regulated, and employees processing vegetable should be better trained.

Irradiation is Impractical

Irradiation damages many foods and can ruin their flavor, odor, and texture. The process destroys vitamins, protein, essential fatty acids and other nutrients – up to 80 percent of vitamin A in eggs and half the beta carotene in orange juice. A dose of radiation sufficient to kill bacteria in fragile produce such as spinach would render it inedible.

Today, there are only two operating commercial irradiation facilities, located in Iowa and Florida, specifically

designed to irradiate food. Finding hubs for irradiation facilities to treat vegetables produced by farms all over the country would be difficult. And fresh lettuce, spinach and other vegetables have a very short shelf-life, so they very likely could not survive the additional transportation and handling time that irradiation requires.



Irradiation May Be Dangerous

The U.S. Food & Drug Administration approved food irradiation for many foods in spite of paltry and flawed data on safety and in violation of their own safety protocols. However, between the cost, the practical problems, and consumer distaste for the technology, very little irradiated food is on supermarket shelves today. A push to irradiate a significant portion of the U.S. food supply would effectively subject the American public to a huge experiment on the safety of irradiated foods, Hauter said.

Scientists have observed serious health problems in lab animals fed irradiated foods. Those include premature death, cancer, tumors, stillbirths, mutations, organ damage, immune system failure and stunted growth. In one experiment, genetic damage was detected in young children who ate irradiated wheat. In some foods, irradiation forms chemicals known or suspected to cause cancer and birth defects. One chemical, 2-ACBs, has been linked to cancer development in rats and genetic damage in human cells.

What You Can Do

Americans deserve better food safety solutions from their government and the food industry than expensive, impractical, ineffective, and potentially dangerous technologies like irradiation. Tell Congress and FDA that you don’t want your food irradiated and you want any irradiated food clearly labeled.

Find out more at www.zappedfood.org

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