

# Irradiated Meat: A Sneak Attack on School Lunches

By [Monique Mikhail](#)

The US Department of Agriculture (USDA) has launched a major marketing campaign to include irradiated meat in school lunches. With pressure from the food irradiation industry, which has had little success in grocery stores, the government is encouraging schools to spend more money for food processed with a questionable technology. What's the real story?

On May 29, 2003, despite thousands of comments to the federal government from parents, teachers and children nationwide opposing irradiated meat in the National School Lunch Program (93 percent of those commenting were against it), the government ignored the will of its constituents and approved the use of irradiation for the federal nutrition program. Additionally, at 13-20 cents more per pound, the government is encouraging cash-strapped schools to spend more money for irradiated meat.

Beginning in January 2004, children who participate in the federal program could become guinea pigs in a government experiment that has neglected parental concerns and disregarded numerous studies that show the potentially harmful health effects of eating irradiated food. Research dating to the 1950s has revealed a wide range of problems in laboratory animals that ate irradiated foods, including premature death, cancer, stillbirths, genetic damage, organ malfunctions, stunted growth and vitamin deficiencies.

Children are more susceptible to toxic substances in their environment because they eat, drink and breathe three times as much as adults, pound for pound. Only one study on the effects of irradiated food consumption on children has ever been conducted. A chromosome abnormality called polyploidy--which has been associated with leukemia and direct exposure to radiation--was detected in malnourished children who ate recently irradiated wheat. This is significant, considering that the schoolchildren most likely to consume a high percentage of their daily food intake from the school meal programs are already undernourished because they come from low-income families who cannot afford to send their children to school with homemade lunches. Nowhere in the world has there been a mass feeding of irradiated food to children over a prolonged period of time. And, by offering schools the option of purchasing irradiated meat for school lunches, which feed 27 million children each year, the USDA could become the largest distributor of irradiated food in the world.

Additionally, because federal law does not require labeling of irradiated food served in schools, restaurants, hospitals and similar venues, irradiated meat served in school cafeterias need not be labeled! This makes it impossible for parents to know what school cafeterias are feeding their children and is a blatant violation of parents' right to know.

Approving irradiated meat for school cafeterias nationwide means the USDA is willing to put our children's health at risk to help cover up the meat industry's sanitation

failures. Irradiation is not an acceptable antidote for food safety problems. From strengthening government meat inspection to addressing the appalling disrepair in many school cafeterias, there is much that should be done to improve the safety of food served to our nation's children at school. But using the purchasing power of the federal government to bail out a struggling industry and serve this questionable product to children have no place in a sensible food safety plan.

## How Did This Happen?

The possibility of irradiated meat in school lunch programs began with a provision presented by Senator Tom Harkin (D-Iowa) that was included in the 2002 Farm Bill passed by Congress. This provision directs the Secretary of Agriculture not to prohibit the use of irradiated food in the National School Lunch Program. Previously, irradiated food had been prohibited from the program.

This provision attempted to accomplish legislatively what USDA could not achieve administratively in 2001. In the spring of 2001, the Agricultural Marketing Service (AMS) issued revised specifications for commodity contracts for the National School Lunch Program that would permit the purchase of irradiated food for the program. A public outcry against the inclusion of irradiated food in the National School Lunch Program forced Secretary of Agriculture Ann Veneman to rescind the revised contract specifications.

## Minnesota Pilot Program

In the fall of 2002, the USDA provided the Minnesota Department of Children, Families and Learning with a \$151,000 grant to develop education materials in three Minnesota school districts on the issue of food irradiation. This pilot "education" program was conducted in three Minnesota school districts--Spring Lake Park, Sauk Rapids, and Willmar--and was intended to increase public acceptance of irradiated foods in school lunch programs by developing materials to be sent to school districts nationwide.

It is clear that the program was nothing more than an irradiation promotion campaign. In fact, Minnesota's grant proposal states that "a successful outcome of the 'educational' campaign will be the acceptance and introduction of irradiated ground beef by select school districts." Nearly half of the "pilot partners"-- officials at the USDA and in Minnesota as well as industry--who played critical roles in the development of the program had ties to the SureBeam Corporation, an irradiation company based in San Diego.

However, the program was a complete failure, both in its implementation, and in the unexpected parental outrage. The most visible opposition came in the Spring Lake Park District, where parents formed a group, Healthy Kids Minnesota, and attempted to get the district to end its participation in the project. After several months, the superintendent stated that the school district would not be buying irradiated beef this year and has no intention to do so in the future. The parents of Healthy Kids Minnesota are continuing their efforts to educate parents across the state about this issue.

In early May 2003, the Sauk Rapids School District pulled out of the irradiation "education" campaign. According to the school superintendent, the district felt it was being placed in the position of promoting irradiation, to which they had not previously agreed.

## States Opting Out

The National School Lunch Program decision is multi-layered. State departments of education must purchase the irradiated beef from the federal government and then school districts must choose to purchase the irradiated beef from their state officials.

For example, due to the USDA pro-irradiation information sent to schools nationwide, a school district in Indiana chose to purchase the irradiated ground beef while admitting that they had absolutely no idea what it was, according to *The Star Press* ("Irradiated ground beef OK'd by school" on 7/21/03). Fortunately, however, state officials have said that the demand is not great enough and they won't be purchasing it this year!

Some states are declaring that school district demand is simply not there, and does not warrant them buying irradiated meat. Others are stating that it is up to individual school districts to decide and they will make it available on a case-by-case basis. Some states are undecided on their course of action or were unavailable for comment.

## School Boards Ban Irradiated Meat

Across the country Public Citizen is helping parents work with their school boards to ban irradiated food from their districts. California, often considered a pioneer in trends, is leading the country with success stories! School districts in Los Angeles, (the second largest school district in the country with 72 percent student participation in the lunch program), Berkeley, Point Arena, and Ukiah have all passed resolutions banning irradiated meat from their districts. This is a huge victory for the campaign and for schoolchildren, and shows that it is possible to protect our children!

### **About the Author**

Monique Mikhail is an organizer on food irradiation for the Critical Mass Energy and Environment Program with Public Citizen. After obtaining her bachelor's degree in food process engineering from Purdue University in West Lafayette, IN, Mikhail worked with the National Association for State Universities and Land-Grant Colleges (NASULGC) on International and Environmental Relations. She then worked on organizing with Center for Food Safety's campaign against genetically engineered fish, before beginning her tenure with Public Citizen. Mikhail's activism has included organizing with DC Mobilization for Global Justice for protests against the World Bank/IMF and the FTAA. She has also organized teach-ins, panel discussions, and written magazine articles with DC Left Turn.

For more information, contact her at (202) 454-5185 or [mmikhail@citizen.org](mailto:mmikhail@citizen.org) . You can also go to [www.safelunch.org](http://www.safelunch.org) for information on organizing opposition to irradiated food in your school district.

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## What's Happening in Your State?

- States that will NOT purchase irradiated meat for their schools this year: AK, AR, CT, DC, IN, IA, LA, MA, MD, MI, NM, OK, SD, WI, WY
  - States that WILL purchase irradiated meat for their schools this year: NJ
  - States that are UNDECIDED on purchasing this year: AL, HI, ID, IL, MO, MT, NE, NY, TN
  - States that will let individual school districts decide: CA, CO, GA, KY, MN, NC, NH, PA, SC, TX, UT, VA
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## What You Can Do in Your District

It is up to your school district food service director and school board to choose whether or not to purchase irradiated beef. Work needs to be done at the local level to prevent this in our own school districts!

- Protect your kids and the children in your community by working with your school board to pass a formal resolution banning the use of irradiated foods in your school district! Contact us at (202) 454-5185 or download an organizing kit by going to [www.safelunch.org](http://www.safelunch.org).
  - The choice is up to state officials as well as local officials. Call your state food service director and tell them that you don't want irradiated meat served to your children! Go to [www.safelunch.org](http://www.safelunch.org) for contact information to your state food service director.
  - Contact your representative and senators today to urge them not to support irradiated food in school lunches, and to correct the damage done by last year's Farm Bill. The capitol switchboard number is (202) 224-3121.
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## SureBeam Closes Processing Plant

SureBeam Corporation, which describes itself as "a leading provider of electron beam food safety systems and services for the food industry," will close its Vernon, California plant "to address a current oversupply of capacity." In other words, people aren't buying into the propaganda for irradiated food and the recent vote of the Los Angeles School District against irradiated meat for children's lunches has doused hopes for increased sales. We look forward to more plant closings.

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## Safety Issues of Irradiated Food

- Ionizing radiation is a well-documented teratogen, mutagen and carcinogen whereas some other procedures for food decontamination/sterilization such as heat and steam are not. Ionizing radiation interacts with cellular macromolecules that are also present in food products to generate toxic products. Therefore, the use of radiation to decontaminate/sterilize foods that are destined for human consumption should be evaluated for health concerns very carefully. Whenever other processing methods or combination of methods that are equally effective in reducing the risk of food-borne disease are available, the use of the radiation procedure should be avoided. Therefore, it is surprising to learn from the Food and Agriculture Organization/International Atomic Energy Agency/World Health Organization report (1999) that those agencies gave a blanket statement of approval in the conclusion section "the study group concluded that no upper dose limit need be imposed." (p. 161). This decision can lead to misuse of the procedure in processing food for human consumption.
- Some reports in the peer-reviewed literature on mutagenic activities of irradiated foods were not considered in the 1999 FAO/IAEA/WHO report (Bhaskaram and Sadasivan, 1975; Vijayalaxmi, 1975, 1976, 1978; Vijayalaxmi and Sadasivan, 1975; Vijayalaxmi and Rao, 1976). Although the observations from these studies are not confirmed by some publications in the literature, the positive findings have support from other publications (Bugyaki et al., 1968; Moutschen-Dahmen, et al., 1970; Anderson et al., 1980; Maier et al., 1993). Furthermore, repeated observations of activities that have significant public health implications such as polyploidy in somatic cells, genetic alterations in germ cells and reproductive toxicity should not be ignored, but should be considered seriously and explicitly by FDA with respect to the pending food irradiation petitions.
- Radiolytic products are formed during the irradiation of food (Schubert, 1969). Their potential health hazards have not been adequately evaluated. An emphasis should be placed on the products that are unique to the irradiation process and that are potentially mutagenic, e.g. 2-dodecylcyclobutanone (Delincee and Pool-Zobel, 1998; Delincee et al., 1998). The quality and quantity of these radiolytic products may be different from one food type to another. Without conclusive evidence regarding the safety of these products, the safety of irradiated food cannot be assured. Conclusive evidence of safety of these products can be derived from in vivo studies published in peer-reviewed journals.
- The formation of hazardous free radicals in irradiated food that can cause DNA damage is of serious concern. For food with high water content, the free radicals are rapidly degraded after irradiation. Therefore, human exposure to the free radicals through the food chain is minimal. For food with low water content, the Food and Drug Administration stated that "irradiated dry spices and seasonings are examples of foods in which free radicals are known to persist for long periods of time." (FDA, 1986, p. 13379). However, the FDA concluded that this should not be of concern based on the manner in which these foods are used. On the other hand, the concerns for other dry foods that are consumed without further cooking and that are consumed in large quantities, such as dried fruits and nuts, are not considered. This possibility should be evaluated to determine the potential for exposing consumers to free radicals. This concern should be included in the FDA's analysis of the "ready-to-eat food" irradiation petition, FAP 9M4697.

Taken from Sworn Affidavit of University of Texas toxicologist William Au raising concerns about the risks posed by chemicals formed in irradiated food, October 28, 2001. For references see [http://www.citizen.org/cmep/foodsafety/food\\_irrad/articles.sfm?ID=6515](http://www.citizen.org/cmep/foodsafety/food_irrad/articles.sfm?ID=6515).