

# INFORMATION MEMORANDUM

**DATE:** September 29, 2003

**TO:** MEMBERS, STATE BOARD OF EDUCATION

**FROM:** SUE STICKEL  
Deputy Superintendent, Curriculum & Instruction Branch

**SUBJECT:** Irradiated beef and its use in the National School Lunch Program and School Breakfast Program

## Summary of Key Issues(s)

As part of the 2002 Farm Bill, Congress directed the United States Department of Agriculture (USDA) to permit the use of approved food safety technology --- including irradiation --- for food purchased for the National School Lunch and School Breakfast Programs. Beginning January 2004, USDA will offer irradiated ground beef as a choice, along with nonirradiated ground beef, for delivery to schools along with other commodities.

There may be some local controversy and press coverage as each district chooses whether or not to accept irradiated beef from USDA for use in their school meal programs. For example, the Los Angeles Unified and Elk Grove Unified School Districts have decided not to accept irradiated meat.

## Background

USDA Undersecretary Eric Bost sent a letter to all school districts explaining that the nutritional quality and safety of meals served to children participating in the National School Lunch Program continues to be a top priority, but that the decision to order and serve irradiated ground beef will be made by local school districts. USDA will identify irradiated meat by both the word "Irradiated" as well as the international symbol for irradiation, "Radura," printed on the case label.

Food irradiation is a process that uses radiant energy including gamma rays, electronic beams, and x-rays to reduce the risk of foodborne illness by destroying harmful bacteria, parasites, insects, and fungi and to extend shelf life. Specifically, irradiation kills E. coli bacteria in beef and salmonella bacteria in poultry.

A variety of foods, e.g., pork, poultry, white potatoes, fresh fruits, and spices have been approved for irradiation by the USDA and the Food and Drug Administration (FDA) for consumption by the American people since the 1960's; however, not all pork, poultry,

Irradiated beef and its use in the National School Lunch Program and School Breakfast white potatoes, fresh fruit, or spices are irradiated. Those products that have been irradiated are labeled. No school districts currently receive USDA commodity foods that have been irradiated.

### Advantages

During the irradiation process, an electron gun is used to propel a stream of high energy electrons through the food which is being processed. The streaming electrons disrupt the DNA chains of any bacteria present, killing it or rendering it unable to reproduce. At doses that are commonly used to irradiate ground beef, USDA reports that pathogens are reduced by these levels: E. coli 0157:H7 99.99% to 99.9999%, Salmonella 99% to 99.9%, and Listeria 99.9% to 99.99%.

There also have been over 500 scientific papers published on the safety and effectiveness of irradiation during the past 50 years. Experts from the World Health Organization, the USDA, the FDA, the Centers for Disease Control and Prevention, the University of California at Davis, and other scientific organizations have examined four decades of cumulative food irradiation research and have found no evidence that irradiated food is toxic, cancer-causing, or hazardous to human health. Studies show that irradiation does not significantly change the nutrient content of foods any more than freezing or cooking.

### Disadvantages

In a recent article, Consumer Reports reported on their tests of more than 500 meat samples from grocery stores in 60 cities<sup>1</sup>. They found that levels of bacteria in irradiated meat were significantly lower than what USDA reports (90 to 99 percent) when compared to non-irradiated meat. Their tests also found that irradiated beef and chicken had a slight off-taste and came with the same food handling instructions as regular meat. Consumer Reports concluded that irradiation provides minimal benefit for the careful cook.

Three groups, Public Citizen, Institute for Agriculture and Trade Policy, and the Center for Food Safety, have expressed concerns regarding the safety and use of irradiated meat. Public Citizen strongly opposes the use of irradiated foods in the National School Lunch Program and School Breakfast Program, believing that irradiated food warrants much more scrutiny and scientific study. The other groups concur that more research is needed on irradiation's safety before serving it to school children.

**Attachment 1:** Letter to Superintendents from Eric M. Bost, Under Secretary, Food, Nutrition, and Consumer Services, 2003, (Pages 1-2)

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<sup>1</sup> "The Truth About Irradiated Meat." *Consumer Reports*, August 2003, 32-36.

Dear School Superintendent:

Ensuring the nutritional quality and safety of meals served to children participating in the National School Lunch Program continues to be a top priority for the Department of Agriculture (USDA). As part of the 2002 Farm Bill, Congress directed USDA to permit the use of approved food safety technology for food purchased for the National School Lunch Program. This includes irradiation. I wish to take a moment to explain how this Congressional directive is being implemented, and how it affects your food service program.

Beginning January 2004, USDA will offer commodity irradiated ground beef as a choice, along with non-irradiated ground beef, for delivery to schools. Your State will be sent irradiated product only if you order it. You will know if the commodity ground beef you receive is irradiated by both the word "Irradiated" as well as the international symbol for irradiation, the "Radura", printed on the case label.

To help your school community make an informed choice on the ordering of irradiated ground beef, you are strongly encouraged to engage in an educational effort on food irradiation before ordering irradiated product. You are being provided with the enclosed brochure based on scientific information to help in that endeavor. This same brochure may be found at <http://schoolmeals.nal.usda.gov/Safety/FNSFoodSafety.htm> for your convenience to print and use. Other opinions and issues related to irradiation can be found at various organizations' websites such as those enclosed with this mailing. In addition, a school community food safety educational campaign, which includes partnership strategies, consumer education, training and other materials, is currently being developed and tested in the State of Minnesota. USDA will make these available for your use in Fall 2003 and will notify your State Department of Education of their availability.

Finally, and very importantly, should you choose to serve irradiated ground beef in your program, you are strongly encouraged to inform students and parents in order to allow them the choice of consuming irradiated products or not. This communication should be through a combination of mechanisms such as a letter to parents at the beginning of the school year, posting on your website, indications on the monthly menu of which products are irradiated, and signage on the serving line.

Thank you for your cooperation, as we work together to protect the safety of our schoolchildren. Please e-mail any questions you may have to [schoolbeef@fns.usda.gov](mailto:schoolbeef@fns.usda.gov).

Sincerely,

Eric M. Bost  
Under Secretary  
Food, Nutrition, and Consumer Services

Enclosures

cc: District School Food Service Director