

EIR Science & Technology

Will food irradiation's benefits be for export only?

Commercialization of this proven technology has lagged far behind its promise, thanks to the lies spread by the anti-science lobby. Marjorie Mazel Hecht reports.

After 40 years of U.S. research, food irradiation has been proven to be a safe, effective, and inexpensive way to disinfect foods and prolong their shelf life. At a time when 40-50% of all U.S. chickens are contaminated with salmonella bacteria, and mealy bugs appear in grain products, the prospect of disease-free poultry, trichina-free pork, fish that stays fresh in the refrigerator for two or three weeks, and fruits, vegetables, and grains that are insect-free seems like a welcome advance for the consumer. Yet, commercialization of this technology in the United States has lagged far behind its promise.

After five years of investigation, the U.S. Food and Drug Administration issued a regulation permitting low-dose (100-kilorad) irradiation of fruits and vegetables in April 1986, and permission for low-level irradiation of fresh pork followed.

But then the anti-nuclear lobby mobilized to slow down commercialization of the technology in the United States. These anti-science advocates have spread fear and lies, telling people that irradiated food has unidentified, dangerous substances in it and that it is all a plot on the part of big business to make more money.

In the developing sector, where food spoilage can take up to 90% of a crop and where starvation is an immediate prospect, the technology is being taken more seriously. United States firms that have developed the technology and plants for commercialization are thus looking elsewhere for their markets—Africa, Asia, Ibero-America.

Twenty-eight countries now have approved the use of food irradiation for 40 different food products. In fact, the United States, which pioneered the technology, now trails

the rest of the world in its development. Also, the internationally accepted food irradiation standards allow 10 times the amount of irradiation permitted by the Food and Drug Administration here.

Saving money—and lives

The statistics on how food irradiation will save money and lives are startling. In testimony presented to congressional hearings of the Subcommittee on Health and the Environment in June 1987, one of the pioneers of food irradiation, Dr. Edward S. Josephson, reported that food-borne salmonellosis affects 2-4 million people annually, with approximately 2,000 deaths. There are another 2.1 million cases of campylobacter infections from infected chickens, with 2,100 deaths.

In 1985, a report prepared for the Office of Technology Assessment by two U.S. Department of Agriculture economists calculated that the time lost from work by people who ate pork infested with trichinosis and toxoplasmosis could be reduced by \$180 million and \$280 million annually if pork were irradiated at low levels. The estimated cost for that irradiation was \$80 million, providing a net annual benefit of between \$100 and \$200 million.

Similarly, the same report states that if chicken is irradiated for control of salmonella and campylobacter, it would reduce the cost of time lost from work because of these infections by between \$341 million and \$653 million.

Dr. Josephson reported that the cost of controlling these two infections in chickens would be about \$155 million, thus providing a net benefit of between \$200 million and \$500 million annually.