

Food Irradiation



The American Nuclear Society endorses the expanded use of food irradiation technology as part of a comprehensive program to improve the safety of the food supply.

Based on continual irradiation safety evaluations for more than 40 years, the U.S. Food and Drug Administration (FDA) has approved irradiation of various foodstuffs including wheat, potatoes, processed pork, herbs and spices, poultry, and molluscan shellfish. In 1986, the list was expanded to include fruits and vegetables, and in 1997, red meat was added. In 2008, the FDA allowed for increased irradiation dosages in lettuce and spinach sufficient to destroy disease causing bacteria.^{1,2}

Over decades of study the FDA and other international organizations such as the International Atomic Energy Agency and the World Health Organization have consistently concluded the following:

- Food does not become radioactive as a result of irradiation.
- The irradiation process is effective in decreasing or eliminating disease-causing microorganisms such as *Escherichia coli* (*E. coli*), *campylobacter*, and *salmonella* from foods.
- Irradiation reduces spoilage caused by bacteria, insects, and parasites.
- Irradiation inhibits sprouting and delays ripening in some fruits and vegetables.
- Irradiation does not alter in any significant manner the nutritional value of food.

- Alterations in food created by irradiation are like those created by cooking and other processing.
- The irradiation process as regulated by the FDA is safe.

In order to improve the safety of the food supply, the American Nuclear Society recommends the following:

- The FDA continues to investigate and approve the irradiation of additional foods.
- The FDA and the U.S. Department of Agriculture continue to increase their efforts to inform the producers, the food-processing community, and the consumers about the benefits of food irradiation

More information can be found in the following documents:

“Irradiated Food & Packaging,” U.S. Food and Drug Administration: <http://www.fda.gov/Food/IngredientsPackagingLabeling/IrradiatedFoodPackaging/default.htm>

“Facts About Food Irradiation,” International Consultative Group on Food Irradiation, International Atomic Energy Agency: <http://www.iaea.org/Publications/Booklets/foodirradiation.pdf>

“Irradiation: A Safe Measure for Safer Iceberg Lettuce and Spinach,” U.S. Food and Drug Administration Consumer Health Information: <http://www.fda.gov/forconsumers/ConsumerUpdates/ucm093651.htm>

References

1. <http://www-naweb.iaea.org/nafa/fep/index.html>
2. <http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm093651.htm>



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