



United States Department of Agriculture
Food Safety and Inspection Service



IRRADIATION AND FOOD SAFETY

Answers to Frequently Asked Questions

Q How should I handle irradiated meat and poultry?

A Irradiation does not replace safe cooking and handling. You should always follow the four safe food handling steps:

CLEAN. Wash hands, surfaces, and utensils often.

SEPARATE. Don't cross-contaminate.

COOK. Cook food to a safe internal temperature. Check the temperature with a food thermometer.

CHILL. Refrigerate or freeze within 2 hours.

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For more food safety information, contact:

USDA Meat and Poultry Hotline
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As part of its public health mission to reduce the risk of foodborne illness, the U.S. Department of Agriculture’s (USDA) Food Safety and Inspection Service (FSIS) inspects meat, poultry, and egg products, including those that are irradiated.

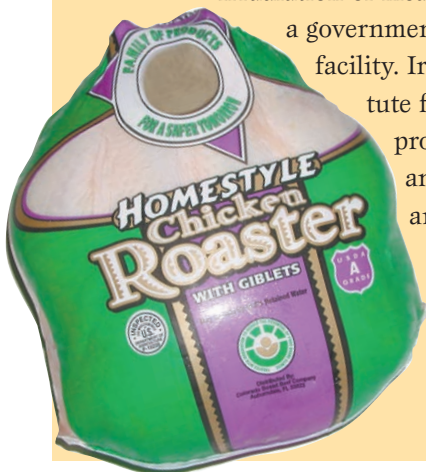
FSIS recognizes irradiation as an important technology to protect consumers. Irradiation of food reduces the numbers of harmful bacteria that may be present in food, including *E. coli* O157:H7, *Salmonella*, and *Campylobacter*.

Many consumers want to know more about what food irradiation is and how it works. This brochure answers questions that consumers frequently ask about food irradiation.

Q What is food irradiation?

A Food irradiation is a process in which approved foods are exposed to radiant energy, including gamma rays, electron beams, and x-rays. In 1963, the Food and Drug Administration (FDA) found the irradiation of food to be safe.

Irradiation of meat and poultry is done in a government-approved irradiation facility. Irradiation is not a substitute for good sanitation and process control in meat and poultry plants. It is an added layer of safety.



Q Are irradiated foods safe to eat?

A Yes. Just as pasteurization makes milk safer, irradiation makes meat and poultry safer by reducing the numbers of harmful bacteria and parasites. Irradiation is an important food safety tool in fighting foodborne illness.

FDA and other public health agencies worldwide have evaluated the safety of irradiation over the last 50 years and found it to be safe. Irradiation has been endorsed by the American Medical Association and the United Nations’ World Health Organization.

In 37 countries, more than 40 food products are irradiated. In some European countries, irradiation has been in use for decades.

The sources and amounts of energy that can be applied to foods have been approved by the FDA and are not strong enough to cause food to become radioactive. Scientific studies show that food irradiation does not significantly change the nutrient content, flavor, or texture of food.

Q What foods are irradiated?

A Fresh meat and poultry including whole or cut up birds, skinless poultry, pork chops, roasts, stew meat, liver, hamburgers, ground meat, and ground poultry are approved for irradiation.

U.S. food regulations also allow the irradiation of wheat and wheat powder, white potatoes, many spices, dry vegetable seasonings, fresh shell eggs, and fresh produce.

Q How will I know if meat and poultry products are irradiated?

A The international symbol for irradiation, the radura, must be on packages if the entire product was irradiated, as well as the phrase, “treated by irradiation” (or “with irradiation”). The radura, pictured here, can be any color. This required labeling gives consumers the option to choose between irradiated and non-irradiated meat and poultry.



If irradiated meat is used in another product, such as pork sausage, then the ingredients statement must list irradiated pork, but the radura does not have to appear on the package.

Restaurants are not required to disclose the use of irradiated products to their customers; however, some restaurants voluntarily provide irradiation information on menus.

For more information on food irradiation and other food safety issues, contact USDA’s Meat and Poultry Hotline at 1-888-MPHotline (1-888-674-6854), TTY for the hearing impaired at 1-800-256-7072, or visit www.fsis.usda.gov