

# Chow Line

News from the College of Food, Agricultural, and Environmental Sciences

## Food irradiation safe, but not widely accepted

**I used to hear a lot about food irradiation, but I haven't heard very much recently. Are foods being irradiated in the U.S.? Is it safe?**

Many foods are approved for irradiation, but you likely won't see them in the grocery store. Most of the reason, many experts say, is because of negative consumer perceptions about the process: Who wants to eat anything that sounds like it has something to do with radiation?

Of course, irradiation doesn't make food radioactive. At lower doses, irradiation kills pests such as fruit flies. At higher levels, it breaks chemical bonds in bacterial and mold cells so they die or can no longer multiply, which could prevent foodborne illness and make food last longer before spoiling.

Food is irradiated by going through a chamber on a conveyor belt, where the food is exposed to a radiation beam. The process affects the food itself only slightly. Any losses in nutrients are minor, about the same as from cooking or freezing.

About a third of the spices and seasonings used in U.S. food manufacturing have been irradiated, as well as a small amount of fruit from Hawaii, Mexico and other places. A few retailers sell ground beef that's been irradiated to reduce the risk of E. coli O157:H7. But irradiation is approved for use on many other foods, including:

- Wheat flour, to control mold.
- White potatoes, to inhibit sprouting.
- Fresh fruits and vegetables, for insect control and to increase shelf life.
- Beef, pork and poultry, to reduce bacteria.
- Crustaceans, such as lobster, shrimp and crab.
- Shell eggs.



image: International Radura symbol for irradiated foods

- Molluscan shellfish, such as oysters, clams, mussels and scallops.
- Seeds for sprouting, such as alfalfa sprouts.

Irradiated foods must say on the label that they've been irradiated and must carry the international logo for irradiation, the Radura symbol. It's a circle with what looks like a flower inside, along with words indicating the food has been irradiated. Bulk foods, such as fruits and vegetables, need to be individually labeled or have the symbol displayed nearby. An exception is foods that contain irradiated ingredients: Canned soups that use irradiated spices, for example, don't have to indicate anything special on the label.

Critics of irradiation argue that it alters food in ways that are not yet clear, and using the process could encourage sloppy practices in the food industry and give people a false sense of security about food safety.

It's true that not all foodborne illness would be eradicated even if every bite of food was irradiated, but public health authorities believe making more use of irradiation could have a significant effect in reducing foodborne illness. The Food and Drug Administration has evaluated the safety of irradiated food for more than 30 years and has found the process to be safe.

To learn more, see the FDA's web page on food irradiation at [go.osu.edu/FDAfoodirrad](http://go.osu.edu/FDAfoodirrad).

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**Editor:** This column was reviewed by Sanja Ilic, Ohio State University Extension food safety specialist and assistant professor in the College of Education and Human Ecology.

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