

Irradiation of Food Helps to Make It Safe

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Food irradiation is not something commonly discussed in normal everyday conversations with friends. It is not a common topic in the media. This is probably because only a small proportion of our food in the United States is irradiated but there is potential for more food to be irradiated to increase the safety of the food supply.

According to USDA's Food Safety and Inspection Service, food irradiation is a process where approved foods are exposed to radiant energy such as x-rays, gamma rays and electron beams. This process reduces the numbers of harmful bacteria in food including E. coli, Salmonella, and Campylobacter. It is important to note that irradiation does not take the place of good sanitation and safe food handling.

Food irradiation is not thought to change the nutritional value of the food any more than other types of processing such as canning. The flavor change is slight and has been compared to the taste change of unpasteurized milk versus pasteurized milk.

In the United States, food irradiation was first approved for wheat flour for the control of mold in 1963. In 1964, irradiation was allowed for potatoes to inhibit sprouting. Other food items approved for irradiation include fruits, vegetables, herbs, spices, meat and poultry. The most recent approval was for fresh iceberg lettuce and fresh spinach in August of 2008. This decision was made after a foodborne illness outbreak caused by contaminated spinach.

Even though irradiation is approved for a variety of foods it is used on a very limited basis. According to the United States General Accounting Office, approximately 97 million pounds of food are irradiated annually. Most of that, 95 million pounds, is herbs and spices. The reason for such a small amount of irradiation is consumers are wary of food irradiation so the food industry only uses it on a limited basis.

Food irradiation is considered to be safe by several well-respected scientific and health-related organizations. The U.S. Food and Drug Administration, Department of Agriculture, Public Health Service and Centers for Disease Control and Prevention consider food irradiation to be safe. The American Medical Association, American Dietetic Association and Institute of Food technologists as well as the World Health Organization also consider the process safe.

If a food is irradiated, it must have a round circle symbol called the radura displayed on the package along with the words "treated with radiation" or "treated by irradiation".