

## Who is backing food irradiation?

Some of the institutions, organizations, and agencies which have gone on record with conclusions to the effect that there will be no increase in risk for consumers from "irradiated" foods include the following:

**FDA:** The U.S. Food and Drug Administration, and in this matter, especially, the Center for Food Safety and Applied Nutrition (formerly, the Bureau of Foods). FDA is part of the Public Health Service, a division of the Department of Health and Human Services, and under the Federal Food, Drug and Cosmetics Act, has jurisdiction on the applications of radiation to the processing of foods.

**USDA:** U.S. Department of Agriculture, especially the Food Safety Inspection Service (FSIS)

**EPA:** Environmental Protection Agency

**NFS:** National Fisheries Service, within the U.S. Department of Commerce

**WHO:** World Health Organization  
**FAO:** Food and Agriculture Organization  
**IAEA:** International Atomic Energy Agency  
**AMA:** American Medical Association  
**CAST:** Council for Agricultural Science and Technology  
**IFT:** Institute of Food Technologists  
**ACSH:** American Council on Science and Health  
**NAS:** National Academy of Sciences  
**NSF:** National Science Foundation  
**NIH:** National Institutes of Health (another branch of FDA)  
**R&DA:** Research & Development Associates  
**NFPA:** National Food Processors Association  
**CFI:** Coalition for Food Irradiation  
**AIF:** Atomic Industrial Forum  
**CRA:** Committee on Radiation Applications  
**ESNA:** European Society for Nuclear methods in Agriculture  
**OSTP:** The President's Office of Science and Technology Policy  
**ANS:** American Nuclear Society

2) Most of the parasites (for example, trichinae and other worms) are made incapable of reproduction and thus incapable of causing problems in human beings with doses of much less than 100 kilorads of picowaves.

3) Most of the bacterial infections require some minimum number of infecting organisms to be present (that is, salmonella are believed to have to be in concentrations of approximately 10 cells per gram of food) before a normally healthy person's immune system cannot prevent discomfort or serious illness, or death.

4) Most food contaminations are in low enough concentrations (that is, number of cells per gram) that a greater than 90% kill of those bacteria present would reduce the incidence of disease by very significant numbers.

One conservative, highly respected European scientist and researcher in food irradiation makes the statement in a paper dated May 1986, "Extensive literature supports the conclusion that radiation treatment at doses that do not cause unacceptable changes in organoleptic qualities can effectively eliminate potentially pathogenic non-sporing bacteria from red meat, poultry and fishery products under normal commercial conditions for products which are marketed in both fresh and frozen stage."<sup>13</sup>

The FDA regulations issued on April 18, 1986 concerning food irradiation are extremely well supported by the scientific community, but still are drafted with an ultra-conservative approach to use of this picowave processing technology. The regulations will allow a reduction in the quantities

of unwanted post-harvest chemical additions to the foods for insect disinfection, but they still do not allow the higher doses or applications to meats, poultry, or fish and seafoods (although petitions for these are reportedly now in the works), which will be necessary for this technology to reach its full potential in terms of improvements in public health and in the quality of life.

Still another public health benefit, and reduction in risks for consumers from eating foods, comes from the ability to use this picowave food processing technology to control the post-harvest movement of insects from one region to another, thus reducing the need to disinfect the fresh fruits and vegetables by using chemical fumigants.<sup>14</sup> Further reductions in chemical additives such as nitrites to the foods could result from use of picowaves in preservation processing.<sup>15</sup>

### Summary

From all of these studies and authoritative conclusions, by recognized scientists and institutions throughout the world, and the many references each of these publications makes, the following obvious conclusions can be drawn:

1) There will be no increase in risk for consumers as a result of eating picowave processed foods!

2) Those who would delay or prevent the use of this picowave processing technology on foods are condemning a statistically significant number of people in the United States (and in the many other nations of the world who use the FDA's food laws as their own) to unnecessary distress, ill-