Health Canada's food-irradiation proposal sets off debate

Health Canada's proposal to allow the irradiation of ground beef and poultry "replaces good food handling practices" and isn't based on sound science, the Canadian Association of Physicians for the Environment (CAPE) says.

"The slaughterhouse industry is out of control," says CAPE President Warren Bell. "They can't safely process the volumes they do in those plants."

However, Health Canada says irradiation isn't a way to "clean up a dirty product," and good hygienic practices will continue to be enforced. Paul Mayers, associate director general at the Food Directorate, said that in the wake of *Escherichia coli* outbreaks, irradiation "has potential as a public health tool," even if it is not a "magic bullet."

The Canadian Cattlemen's Association says it petitioned Health Canada to change the regulations because "Canadians deserve the same safety technology" as Americans, who approved the irradiation of red meat in 2000. "It's very widely used," added spokesperson Cindy McCreath.

Health Canada is considering feedback from groups such as CAPE before approving or altering its proposed regulations, which will also allow shrimp, prawns and mangoes to be irradiated. The regulations could be approved this year.

Irradiation kills disease-causing bacteria, such as *E.coli* and *Salmonella*. It can also extend shelf life. During the process, foods are exposed to different types of radiated energy, but they do not become radioactive. Wheat, flour, potatoes, onions, dehydrated seasoning preparations and whole and ground spices are currently the only foods Health Canada allows to be irradiated and sold.

Opponents say there hasn't been any research on long-term effects on humans who consume irradiated foods and on the plant workers who oversee the treatment process. "There's absolutely weak evidence for safety in humans," says Bell. "It's really pathetic." He compares it with the way industry was allowed to use humans as guinea pigs to assess the long-term impact of products such as tobacco and leaded gasoline.

A review of the research on short-term effects by US-based Public Citizen, a consumer organization founded by Ralph Nader, says the evidence is contradictory and inconclusive (**www.citizen.org**). It also claims that the quality and safety of food is affected. For instance, irradiation destroys a third of the vitamin C in potatoes. However, Mayers says Health Canada is satisfied that "the evidence is there to demonstrate safety." In its fact sheet on irradiation (**www.hc-sc.gc.ca**), the department says that "food irradiation does not lead to changes in the food that, from a toxicological point of view, would have an adverse effect on human health." As well, all irradiated foods must be labelled to allow consumers to buy nonirradiated items if they wish.

Canapress

Is irradiation a new public health tool?

In Canada, opponents charge that irradiation doesn't address the root cause of foodborne illnesses — industrial agriculture. Factory farms and feed lots confine large numbers of animals in small pens, creating an environment where both the animals and their food and water supply are exposed to large amounts of feces. Animals are then transported to industrial-sized slaughtering facilities where as many as 300 cattle are killed per hour. Critics say that the large number of animals slaughtered in a short time makes it impossible to keep fecal material out of meat products.

"These huge operations are the cause of these illnesses," says Lucy Sharratt of the Polaris Institute. "That's more than speculation."

She says the agriculture and nuclear industries are behind the move toward irradiated food. "The food industry is happy with the longer shelf life for these products and it puts a benign face on the nuclear technology by putting it in every kitchen."

More than 30 countries currently allow food to be irradiated for commercial purposes. — *Barbara Sibbald*, CMAJ

Royal College to stay out of journal business

It is too early to say whether a "phoenix will arise from the ashes" of the Royal College *Annals*, but if one does it's unlikely to be a scientific journal, the college's CEO says. "I don't think there is any consideration for pursuing that," says Dr. Michel Brazeau.

The last issue of the *Annals*, which had published for 34 years, was printed in December (*CMAJ* 2003;168[3]:325).

Brazeau says the college held a retreat in January to discuss publishing and other issues, and there are ongoing consultations about the need for a publication that would be expanded beyond *Dialogue*, its existing newsletter. Asked if an online-only publication might be in the offing, he said consultants had told the college to move in this direction 2 years ago. "Now, we're being told not to give up on the print format."

Brazeau said the decision to close the *Annals* was made after the college "took a fundamental look at its value to members."

He said the move has drawn little reaction. "Practically none," he said. "I can count the responses on the fingers of my hand." — *Patrick Sullivan*, CMAJ