

Adjournment Debate

method to prove that food has been irradiated and with what dose. As to the existence of any irradiated food in Canada, Mr. Paul O'Neill, President of the Atomic Energy of Canada Radio-Chemical Company, testifying in committee on December 11, 1986, said:

In fact, in Canada there really is no plant that is irradiating food products on a commercial basis. One or two may have done some test work, but there is no commercial irradiation of food in Canada at this time.

I am informed that in 1982, the U.S. Food and Drug Administration conducted a review of 441 studies done with regard to the potential toxicity of eating irradiated foods. Only "five studies appeared to support safety". Yet the Minister said on November 27, 1986, in reply to my question:

—it is a safe process within the limits which have been prescribed. All international studies have indicated that.

Some people believe the real impetus behind the irradiation concept is the fact that industrial society now has a fantastic accumulation of radioactive waste from nuclear plants for which no suitable disposal system has yet been found. The radioactive isotope used in food irradiation can be produced in the Candu nuclear reactor. Therefore, not surprisingly, Atomic Energy of Canada is a strong supporter of food irradiation.

● (1805)

I am told that when food is irradiated, unstable secondary products called free radicals are formed within the cells. These free radicals have been found to be a major potential factor in the formation of cancer, heart disease and other degenerative diseases. Destroyed cells putrefy and create toxic products. Muted cells multiply out of control and create malignancies and tumours.

I am told that according to a 1986 publication by the Health and Energy Institute of Washington, D.C., there is evidence suggesting that genetic and reproductive irregularities may be associated with the consumption of irradiated food, that aflatoxins, potent cancer-causing chemicals created by fungi occurring naturally in foods, were produced more abundantly than normal on irradiated foods in several studies; that vitamins A, C, E and especially B, may be destroyed by the process; that amino-acids and fats in foods may also be altered; and that irradiation does not protect food from contamination that may occur after the treatment unless, of course, it is tightly sealed at the time of irradiation. Also, meats must be irradiated in a vacuum since irradiation in the presence of oxygen causes rancidity in fat-containing foods. It states finally, that chemicals called "radiolytic products" are produced in foods by the radiation process. These include formaldehyde, peroxide, and others.

Other interesting aspects relating to food irradiation include the fact that bacteria which cause botulism are highly resistant to irradiation and can proliferate without competition in foods irradiated to get rid of other bacteria. Foods must be exposed to 5,000 to 5 million rads of radiation. Approximately 500 rads over a short period of time is a lethal dose for most humans, raising the question of worker safety in food irradiation plants.

The Acting Speaker (Mr. Paproski): On that note I would like to call upon the Parliamentary Secretary.

Mr. Roger Clinch (Parliamentary Secretary to Minister for External Relations): Mr. Speaker, as evidenced by the interest expressed by the Hon. Member, food irradiation is also a topic of considerable interest to many Canadians. This House, through the Standing Committee on Consumer and Corporate Affairs, has heard a number of witnesses and has additional meetings scheduled.

Let me reiterate the response made in the House on November 27 by the Minister of National Health and Welfare (Mr. Epp). Our concern for safety is overriding and continuing. In this regard, food irradiation has been extensively studied by various agencies world-wide. Within the dose levels that would be used in practice, the process is safe.

The irradiation of some foods has been permitted under the Food and Drug Act for some time. Treatment of potatoes and onions to prevent sprouting, of wheat, flour and whole wheat flour for insect disinfection, and of spices for microbial control are allowed by the regulation. However, I have been advised that no irradiated food is currently being sold in Canada.

By way of background, the former Government put forward an information letter in 1983, proposing new regulations applicable to the process. The Health Protection Branch of the Department of National Health and Welfare has been reviewing comments received in response to this information letter. A second information letter will be issued in the next calendar year. This second information letter will respond to the comments and concerns that have been expressed by the Hon. Member and other interested parties and will enunciate the Department of National Health and Welfare's final position in this process.

In keeping with the Government's policy of ensuring public input on major regulatory initiatives, there will be a period in which further public comment will be solicited.

There have been many questions raised about the United States Food and Drug Administration's position on food irradiation versus that of Canada. While the United States Food and Drug Administration has recently approved the irradiation of any food item up to an absorbed dose of 1 kiloGray, only those foods listed in Division 16 of the Canadian Food and Drug Regulations may be irradiated and offered for sale in Canada.

● (1810)

In addition to those foods previously mentioned, wheat, whole wheat, flour and spices are also permitted to be irradiated. Any proposals to irradiate additional food items will have to be evaluated by the Health Protection Branch of the Department of National Health and Welfare, irrespective of the applied dose, and only those foods deemed to be acceptable will be added to the approved list. Thus irradiated foods are, and will continue to be, strictly controlled in Canada.