

RE: LETTER FROM MS. L. PARKER WHICH APPEARED ON THE AGENDA  
FOR THE 1986 JUNE 23 MEETING OF COUNCIL (ITEM 4a)  
FOOD IRRADIATION

ACTING MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the recommendation of the Medical Health Officer be adopted.

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TO: MUNICIPAL MANAGER 1986 AUGUST 01  
FROM: MEDICAL HEALTH OFFICER  
SUBJECT: FOOD IRRADIATION

RECOMMENDATION:

1. THAT a copy of this report be referred to Ms. L. Parker,  
Health Action Network Society, 5338 Ewart Street, Burnaby, B.C.,  
V5J 2W4.

SUMMARY:

Based upon information provided from Provincial and Federal Health Agencies, we cannot support concerns from the Health Action Network Society that food irradiation when used as a method of food preservation is a public health threat.

REPORT

Appearing on the 1986 June 23 Municipal Council Agenda was correspondence from Ms. L. Parker, Health Action Network Society, 5338 Ewart Street, Burnaby concerning public health hazards on consuming food preserved through irradiation. After receipt of the correspondence, Council adopted the recommendation, "That this item be now referred to the Medical Health Officer for Report".

This report defines food irradiation, its existing and proposed regulation and outlines the concerns of some consumer health organizations. The information contained in this report is based upon research that the Environmental Health Division conducted with the Provincial Ministry of Health, Radiation Protection Branch and Health & Welfare Canada.

FOOD IRRADIATION:

Food irradiation is the use of ionizing radiation, either from radionuclides, such as cobalt or cesium or from devices that produce beta rays or x-rays, on food. This process does not make the food radioactive. Tiny amounts of radioactivity are naturally present in all foods and the amount of radioactivity in irradiated food is no higher than this background level.

Food irradiation's main use is to prolong the useful life of foods. Low dose irradiation can kill insects in grains and other stored foods, inhibit sprouting of some vegetables, such as bananas, tomatoes and onions and delay the ripening of some fruits, such as bananas, tomatoes and pears. High dose food irradiation could be utilized for food sterilization or pasteurization. In many ways food irradiation could be grouped with processes such as canning, freezing, drying, refrigerating, and the use of preservatives and pesticides, as another method of preserving food and protecting it from microorganisms, insects and other pests.

REGULATORY GOVERNMENT AUTHORITY:

In Canada, irradiation of food is presently regulated by Health and Welfare Canada, under the "Food Additive Tables" of Division 16, Food and Drug Regulations. Specified low levels of gamma radiation are allowed for potatoes and onions as an antisprouting agent and for wheat, flour and spices for disinfestation. It is presently being proposed by Health and Welfare Canada that the regulatory control of food irradiation be removed from the "food additive" provisions of the Food and Drug Regulations and be replaced with new regulations treating irradiation as a "food process". These proposed regulations would apply to all irradiated food sold in Canada, whether domestic or imported, and would specify,

1. the radiation sources permitted to be used,
2. the foods which may be irradiated, the purpose and the maximum allowable dose,
3. the records to be kept,
4. the procedure for requesting changes or additions to allowable food irradiation practice.

Several consumer health advocacy groups have opposed the enactment of the new regulations. They want food irradiation left as an "additive" thereby requiring the product to be labelled as being irradiated. Presently, food "processes" do not have to be identified on the package label. (Some processes, like canning or freezing, are obvious).

These groups also argue that the safety of irradiated food has not been proven. Independent studies are quoted indicating possible short and long term health problems, reduction of essential nutrients, and changes in the molecular structure of foods.

However, Health and Welfare Canada, in proposing the new regulations, have accepted a 1981 World Health Organization report suggesting that toxicological testing of foods irradiated below 10 kGy (10 Kilograys - equivalent to 1,000,000 rads) is no longer required. The Health Protection Branch states:

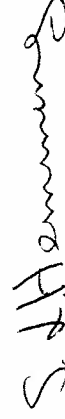
"All studies carried out to date on a large number of individual foods have produced no evidence of adverse effects as a result of irradiation below this dosage level. Based on these considerations, the Health Protection Branch proposes that the requirements for tests to establish safety of irradiated foods will thus be necessary only when the overall average absorbed dose exceeds the 10 kGy value."

All presently approved food irradiation is well below this level.

CONCLUSION:

Taking into consideration the information provided by the Provincial Ministry of Health, Radiation Protection Branch and Health and Welfare Canada, we cannot support the Health Action Network Society on their health concerns for irradiated foods.

We have discussed with Mr. Parker, 5338 Ewart Street, the contents of this report.



S.L. Hemming, M.B., D.P.H., F.R.C.P.(C)  
MEDICAL HEALTH OFFICER