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DRAFT REPORT

on the Commission communication on foods and food ingredients authorised for treatment with ionising radiation in the Community
(COM(2001) 472 – C5-2002/0010 – 2002/2008(COS))

Committee on the Environment, Public Health and Consumer Policy

Rapporteur: Hiltrud Breyer

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PROCEDURAL PAGE

By letter of 8 August 2001, the Commission forwarded to Parliament a communication on foods and food ingredients authorised for treatment with ionising radiation in the Community (COM(2001) 472 – 2002/2008(COS)).

At the sitting of 16 January 2002 the President of Parliament announced that he had referred the communication to the Committee on the Environment, Public Health and Consumer Policy as the committee responsible and the Committee on Industry, External Trade, Research and Energy for its opinion (C5-2002/0010).

The Committee on the Environment, Public Health and Consumer Policy had appointed Hiltrud Breyer rapporteur at its meeting of 6 November 2001.

The committee considered the Commission communication and the draft report at its meeting(s) of

At the latter/last meeting it adopted the motion for a resolution by ... votes to ... , with ... abstention(s)/unanimously.

The following were present for the vote: ... chairman/acting chairman; ... (and ...), vice-chairman/vice-chairmen; ..., rapporteur; ..., ... (for ...), ... (for ... pursuant to Rule 153(2)), ... and... .

The Committee on Industry, External Trade, Research and Energy decided on 22 November 2001 not to deliver an opinion.

The report was tabled on

The deadline for tabling amendments will be indicated in the draft agenda for the relevant part-session/ison

MOTION FOR A RESOLUTION

European Parliament resolution on the Commission communication on foods and food ingredients authorised for treatment with ionising radiation in the Community (COM(2001) 472 – C5-2002/0010 – 2002/2008(COS))

The European Parliament,

- having regard to the Commission communication (COM(2001) 472 – C5-2002/0010¹),
 - having regard to Rule 47(1) of its Rules of Procedure,
 - having regard to the report of the Committee on the Environment, Public Health and Consumer Policy (A5-..../2002),
- A. whereas the Commission is consulting the European Parliament on completing the Community list of foodstuffs authorised for irradiation within the European Union; whereas the final list should reconfirm that protection of consumer health and the environment must take precedence over all other considerations,
- B. whereas Article 174(1) of the EC Treaty says that Community policy shall contribute to preserving, protecting and improving the quality of the environment and protecting human health and that this policy shall be based on the precautionary principle,
- C. whereas framework Directive 1999/2/EC concerning foods and food ingredients treated with ionising radiation requires that a food item may be irradiated only if there is a technological need, the treatment poses no health hazard, it is of benefit to consumers and is not used as a substitute for good hygiene, health and agricultural practice; whereas any food irradiated or containing irradiated ingredients must be labelled and irradiated foods from third countries must be accompanied by detailed documentation and must have been treated only at Community-approved facilities,
- D. whereas only Belgium, France, Italy, the Netherlands and the UK allow irradiation of foods other than herbs, spices and vegetable seasonings² and, in practice, few foods are irradiated even in these countries, demonstrating little technological need,
- E. whereas consumer bodies doubt the technological need and benefit to consumers and predict misuse of the technology to substitute for good hygiene; whereas food producers and traders of meat products, dried fruit/vegetables, potatoes, milk products, cereal flakes and tea are not in favour of including their products on the list, demonstrating little technological need,
- F. whereas the irradiation industry, which calls for inclusion in the Community list of all

¹ OJ C

² For a full list of the food categories permitted in these Member States, go to the document below on the Europa website: http://europa.eu.int/comm/food/fs/sfp/fi12_43-18_en.pdf.

foods which received a favourable opinion from the Scientific Committee on Food, will gain financially from greater use of irradiation,

- G. whereas sale of illegally irradiated, unlabelled foods already occurs within the EU, for example, in the UK¹, and is a potential health hazard; whereas breaches of labelling laws mislead consumers,
 - H. whereas irradiation depletes some nutrients and produces radiolytic products in some foods, some of which may pose health risks; whereas data on long-term health effects of eating a diet based largely on irradiated foods are lacking and the precautionary principle should be applied until such data are available,
 - I. whereas irradiation supports longer-distance transportation of foods, encouraging an unsustainable food supply trend,
 - J. whereas irradiating with radioactive (gamma) sources poses safety risks to workers, health and environment through accidental exposure and leaks and risks to security through acquisition of radioactive materials by terrorists seeking to make 'dirty bombs'; whereas improved safety and security measures at gamma irradiation plants may raise costs leading to higher prices for irradiated foods,
1. Welcomes the Commission's consideration of consumer and food industry opinions in finalising the Community list and the emphasis on consumer benefits, genuine technological need and avoidance of treatments which can be misused to substitute for good practice;
 2. Welcomes the Commission's suggestion that the current list be regarded as complete and requests that this be accepted so only herbs, spices and vegetable seasonings are permitted for irradiation in the EU;
 3. Requests the Commission to provide more resources immediately to accelerate the development and validation of safer substitutes for chemical fumigation and methyl bromide than food irradiation for food disinfestation;
 4. Calls on the Commission to require annual testing programmes by all Member States to prevent illegally irradiated, unlabelled products from being sold and to require all results to be made publicly available with tough action against breaches of the law;
 5. Asks that a mechanism of sanctions be introduced into the Directives against food importers or manufacturers who fail to carry out adequate monitoring to ensure they are not supplied with illegal irradiated ingredients or products and against producers and importers who withhold relevant information;
 6. Insists that research into the long-term health effects of eating a diet largely comprised of irradiated foods be conducted and peer-reviewed before any additional foods are

¹ The UK Food Standards Agency reported in June that dietary supplements, seafoods and a spice product were illegally irradiated. See http://www.foodstandards.gov.uk/news/pressreleases/irradiated_food_pr

considered for inclusion in the Community list and that no additional foods shall be added to the list if any evidence of long-term health risks emerges;

7. Stresses that the short- and long-term effects of eating a diet largely comprised of irradiated foods on children's health should be used as a reference for human health risk assessments, given the enhanced sensitivity of children to chemical exposure and depletion of nutrients in food;
8. Stresses that the substitution principle should apply: dangerous processes should be substituted with safer processes; this should be a duty for food producers and processors in order to avoid risks to workers, human health and the environment;
9. Instructs its President to forward this resolution to the Council and Commission.

EXPLANATORY STATEMENT

1. Introduction

The Commission's strategy for completing the Community positive list is welcomed. The emphasis placed on benefits to consumers, real technological need and avoidance of technologies which could be substituted for proper health and hygiene practices is commended. This justifies selection of the third option suggested by the Commission, which is to consider the current list as complete with only herbs, spices and vegetable seasonings included, and no new food categories added.

The promotion of food irradiation by the nuclear and irradiation industry over the past 50 years has been intense, despite relatively little interest in the technology around the world, and despite the cautious approach adopted by most European and many other national governments.

Commercial development of food irradiation technology was first promoted by US President Eisenhower's 'Atoms for Peace' programme, launched in 1953. Public attention was directed towards nuclear energy and other peaceful uses of nuclear technology. Re-use of radioactive waste and by-products from the atomic energy programme to irradiate food was considered useful, however subsequent studies on the health effects of eating irradiated food raised serious doubts. Around the world some countries banned the technology while others permitted it, forming barriers to trade in irradiated food.

The International Atomic Energy Agency (IAEA) established the Joint Expert Committee on Food Irradiation (JECFI) in 1964 with the Food and Agriculture Organisation (FAO) and the World Health Organisation (WHO) in order to overcome the international inertia by co-ordinating further research into the safety of irradiated food. JECFI produced reports which by the early 1980s had given clearances for the irradiation of all foods up to a maximum average dose of 10 kGy. However, during the 1980s public opposition emerged and slowed the pace at which food irradiation was introduced around the world. The late 1990s have seen a dramatic resurgence in efforts to promote food irradiation, but the opposition from consumers, food industry and some national governments has also grown, due to a wide range of unresolved concerns.

2. Irradiation in practice

2.1 Misuse of food irradiation

Recent cases of severe food poisoning in the US have fuelled the irradiation debate. It is acknowledged that the intensification of food production and consolidation of the food industries enable foodborne pathogens to infect many consumers over wide areas. Proponents of irradiation argue that this makes irradiation essential as an end-of-line safety measure. However irradiation for food safety could become a technical 'fix' for poor and deteriorating hygiene standards in increasingly industrialised mass production of food.

Cases of illegal use of irradiation at European facilities to clean up contaminated seafood were exposed in the late 1980s. Sale of unlabelled irradiated spice mixes and foods containing herbs and spices has also occurred in Member States. The development of validated testing

methods for the detection of irradiated foods has made it easier to expose these abuses.

In June 2002 a UK government survey revealed that 42% of dietary supplements tested (58 out of 138) had been irradiated or contained an irradiated ingredient. None of these are permitted for sale in the UK. This was in spite of repeated warnings to manufacturers by the Government, the BBC and consumer organisations, over a period of at least twelve months, that illegal, irradiated products were on sale in the UK. The survey also found five irradiated seafood samples (prawns and shrimps), also illegal in the UK, and one irradiated spice product. None of these irradiated foods were labelled.

Some food authorities view these occurrences as being an abuse of consumer choice, but not in any way a health hazard. This is a potentially dangerous misrepresentation. Irradiation at the doses which most foods can withstand does not make them sterile. Lethal spores and toxins produced by some bacteria can remain in the food after irradiation, e.g. spores of *Clostridium botulinum*. Irradiated seafoods that were contaminated can therefore still be unsafe. Health authorities should consider not only the bacteria that have been destroyed but also the toxins, spores and the few bacteria that may remain in the food. There are also other pathogens in food that are not destroyed, such as viruses and prions (e.g. BSE).

Irradiated food products require extra care after irradiation in order to avoid rapid and dangerous recontamination. A consumer who is unaware that a product has been irradiated, because it was done illegally and has no label, may not take enough care.

2.2 Risks to workers, the environment and security

Use of radioactive materials for irradiating foodstuffs involves serious risks. Workers can suffer accidental exposure, while radioactive spills and leaks from plants and during transportation of radioactive materials put the environment and human populations at risk through contamination of groundwater and food chains. Several such accidents, some involving worker fatalities, have occurred in the US, Hawaii, Italy, Norway, Mexico, Brazil, El Salvador and Australia.

It has been reported that around 200 losses and thefts of radioactive materials occur each year. Recent events in the US have raised concerns over the potential for terrorists to obtain such materials for use in 'dirty bombs' – conventional bombs laced with radioactive materials. Building more plants that hold radioactive materials means more security risks for everyone. Improvements to security are now essential, yet these will increase the maintenance costs of irradiation facilities, meaning higher prices for irradiated foods – not for the benefit of the consumers.

The authorisation of more foods for irradiation in Europe may mean a larger market for irradiated foods and an incentive to build more irradiation facilities around in the world. This will include many countries where security controls are weak. Completing the Community list with only herbs, spices and vegetable seasonings included is therefore the most responsible course of action for the safety of Europeans and populations around the world.

2.3 Implications for sustainable development

Food irradiation supports the trend towards centralised mass production and distribution of

foods world-wide. Extended shelf life allows transportation of foods over greater distances contributing to increased fuel consumption, greenhouse gas emissions and air pollution, socio-economic decline among small-scale local farmers and loss of wildlife habitats to industrial farming and road construction. By supporting the current food supply system food irradiation undermines the objective of sustainable development.

3. Assurances of safety - conflicting and unreliable evidence

It is often claimed that irradiation is the best-researched of all food processing methods. The WHO has stated that, based on the large number of research studies which have been conducted over recent decades, irradiated food is safe and nutritionally adequate at any dose necessary to achieve the technological aim.

Yet concerns remain over the fact that irradiation depletes some important nutrients in foods, and over the radiolytic products produced in irradiated foods, some of which are known to have carcinogenic and mutagenic effects. For example, preliminary findings in a recent study, carried out by the International Project in the Field of Food Irradiation at Karlsruhe in Germany, suggest that some radiolytic products formed in irradiated fatty foods, called cyclobutanones, could cause DNA damage. The Karlsruhe study indicated DNA damage in rat and human cells, and this could potentially lead to carcinogenic or mutagenic effects in those eating these foods. These chemicals have not yet been found in non-irradiated foods and therefore require thorough, long-term investigation in order to assess their impacts on health.

There are concerns that many of the studies into the health effects of irradiation, including some produced by JECFI, upon which bodies such as the WHO base their judgements, were badly designed, poorly conducted or inadequately reported. It is often difficult to make direct comparisons between studies which showed some adverse health effects because the experiments were not conducted under identical conditions. Some key reports which made pronouncements on safety were inadequately referenced, making it hard to check the scientific evidence on which the conclusions were supposedly based.

These uncertainties cast doubt on assurances that eating irradiated foods is completely safe. Research into the long-term health effects of eating a diet largely comprised of irradiated foods still needs to be conducted and scientifically reviewed before any more foods are added to the Community list. Children's health should be used as a reference for human health risk assessments, rather than the average adult, given the enhanced sensitivity of children to chemical exposure and to depletion of nutrients in food.

It should be noted that the irradiation industry will gain considerably from the increase in use of irradiation and can therefore be expected to pursue ever more additions to the Community list.

4. Misleading the consumer

Irradiation can be used to inhibit sprouting and ripening and extend shelf life, however these are natural processes that allow the consumer to judge the age and freshness of products. Similarly, in killing off food-poisoning bacteria, irradiation also destroys bacteria that give off warning smells that food is going bad. In this way irradiation can mislead consumers and make it harder for them to tell when food is no longer fit to eat.

There is pressure in the US to replace the term 'irradiated' with euphemisms such as

'electronically pasteurised'. The US Farm Bill 2002 contains amendments which allow the process of redefinition to begin. This new terminology may lead to more sales of illegally irradiated imported products in the EU. A strong position against food irradiation is needed to prevent erosion of consumers' right to know if and how their food has been processed.

5. General comments on the EU food irradiation strategy

Promoters of irradiation claim that it is the best alternative to the use of chemical fumigation and methyl bromide for the disinfection of food. However it is inadvisable to replace one hazardous practice with another which is both hazardous and insufficiently understood. The Commission and national governments urgently need to provide more resources to accelerate the development and validation of alternatives other than food irradiation.

More foods should not be added to the list while illegally irradiated, unlabelled irradiated products are on sale to consumers. National governments should be required to conduct regular testing programmes in order to prevent these sales from occurring. They should be required to make all results publicly available and to strongly enforce breaches of the law.