Food Irradiation in the European Union

A Regulatory Summary

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Food Irradiation in the EU

Regulatory Summary

Overview

- Legislation
  - European Directives
  - (National Regulations)

- Approval of food irradiation facilities
  - In Member States of EU
  - In non-EU countries (“Third Countries”)

- Importation of irradiated food
  - Food entering the UK
1. Legislation

- European Directives
Two European Directives

1999/2/EC

1999/3/EC

A Directive is . . . . . .
Two European Directives

1999/2/EC

1999/3/EC

A Directive is a legislative act of the European Union which requires member states to achieve a particular result without dictating the means of achieving that result.
Framework Directive

• Directive 1999/2/EC
  – The Framework of controls on food irradiation
    • conditions for the approval of irradiation facilities
    • imports from third countries
    • dosimetry and procedures
    • labelling of irradiated food
    • it does not list what foods are allowed to be irradiated
      – Article 4 states that a list will be established in steps and given in a separate Directive
Directive 1999/3/EC

- The initial positive list
  
  - Food that can be irradiated in all Member States of the European Community
    - “Dried aromatic herbs, spices and vegetable seasonings”
    - maximum overall average dose of 10 kGy

- Until this list is complete, Member States can maintain their national authorisations or bans
  
  - Some countries can allow other foods to be irradiated (Belgium, France, Italy, Netherlands, Poland, United Kingdom)
  - Article 4 of Directive 1999/2/EC
For example in the UK, seven different types of food can be allowed to be irradiated

- fruit
- vegetables
- cereals
- bulbs and tubers
- spices and condiments *
- fish and shellfish
- poultry

[ Food (Control of Irradiation) Regulations 1990 pre-date Directives. ]
Across the European Union

- Rules governing food irradiation and labelling of foods are the same across the EU.
  - law in each member state must meet Directive 1999/2/EC
    (the regulatory framework)

- Dried aromatic herbs, spices and vegetable seasonings are allowed across the EU
  - Directive 1999/3/EC – the positive list

- However, some EU countries can allow other foods
  - In line with Article 4 of 1999/2/EC – the framework Directive
On the internet

Legislation

http://ec.europa.eu/food/food/biosafety/irradiation/comm_legisl_en.htm

On 4 April 2003, the SCF expressed a revised opinion on the irradiation of food. The SCF confirmed its former position by concluding that only those specific irradiation doses and food classes should be endorsed, for which adequate toxicological, nutritional, microbiological and technical data are available.


In 1994, 1995 and 1996 the SCF expressed favourable opinions on irradiation of fruit, vegetables, cereals, standing herbs, spices and condiments, fish, shellfish, fresh meats, poultry, canned meat from raw milk, frog legs, gum arabic, cascarilla bark, egg white, cereal flakes, rice flour, and blood products. The SCF emphasised that food irradiation must not be used to cover negligence in handling foodstuffs or to mask their unsuitability for use as food.

On the internet

Legislation

http://ec.europa.eu/food/food/biosafety/irradiation/comm_legisl_en.htm

The Framework Directive sets out that:

- The treatment with ionising radiation of a specific food item may only be authorised if:
  - there is a reasonable technological need;
  - it presents no health hazard;
  - it is of benefit to the consumer;
  - it is not used as a substitute for hygiene and health practices or for good manufacturing or agricultural practice;
  - any food irradiated as such or containing irradiated food ingredients has to be labelled;
  - a favourable opinion of the Scientific Committee on Food (SCF) is needed to place a specific food item on the EU-wide list of products authorised for irradiation.

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- **National Authorisations:** allowing the irradiation of certain foods within Member States can be maintained until the completed EU-wide list of products authorised for irradiation enters into force.
- **Member States:** may also maintain restrictions or bans on irradiated foods, in compliance with the rules of the Treaty, until the completed EU-wide list of products authorised for irradiation enters into force.
- **Member States:** shall ensure that the analytical methods used to detect irradiated foods are validated or standardised. The European Committee for Standardisation (CEN) has standardised a number of analytical methods developed with the financial support of the European Commission.

- Foodstuffs may only be irradiated in:
  - approved irradiation facilities in the Member State;
  - or in irradiation facilities in third countries which have been approved by the Community;
2. Approval

Approval of irradiation facilities

• in the European Community
• in “Third Countries”
Article 3 of 1999/2/EC

Conditions, sources, operation, dose calculation

- conditions for authorising food irradiation (Annex I)
- food must be in a suitably wholesome state
- radiation sources (Annex II)
- In accordance with the Codex Alimentarius Code of Practice for the operation of food irradiation facilities
- Overall average dose calculated in accordance with Annex III
Facilities in the European Union (EU)

- Approval by their national authorities, for example a facility in the UK
  - prior approval by the UK Food Standards Agency
  - allocation of reference number
  - official control and inspection
  - withdrawal or modification of approval

Facilities outside the EU

- Approval by the European Community
European Commission

Contact at European Commission

The person who deals with food irradiation is…

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European Commission
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Facilities in third countries

– Approved (licensed) by their national authorities

- the facilities apply for European Community approval through their national authority.

- Their national authority approaches the European Commission

- A “Mission” is arranged and the Food and Veterinary Office (FVO) inspect and produce a report.

- . . . continued
Facilities in third countries - continued

- the mission report and any recommendations are agreed with third country.

- proposal to approve is put to a Standing Committee and voted on by Member States (also put to the European Parliament?).

- If agreed the facilities are placed on the official list of approved facilities.
Across the European Union

- Seven third country facilities are currently Community Approved
  - 3 x South Africa, 2 x Thailand, Switzerland and Turkey
- The Community approval is for the facility
- Imports of irradiated dried aromatic herbs, spices and vegetable seasonings are allowed
  - Directive 1999/3/EC – the positive list
- However, some EU countries can allow other foods
  - In line with Article 4 of 1999/2/EC – the framework Directive
3. Imports

• Importation
Imports of irradiated food

Article 9 of 1999/2/EC

Importation into the Community is allowed if the food

- complies with conditions that apply to the foodstuffs
- accompanied by documents (name and address of irradiation facility, and information required by Article 8)
- treated at a facility approved by the Community
Information / documents required

- Name and address of irradiation facility where treated
- Information referred to in Article 8
  - nature and quantity of foodstuff
  - batch number
  - person ordering irradiation treatment
  - recipient of the irradiated foods
  - date of irradiation
  - packaging material during irradiation
  - absorbed dose (overall average, min and max)
  - the type of ionising radiation
  - reference to the initial dose validation measurements.
Current position
Imports of irradiated food

Imports - Complicated because the legal framework is harmonised, but the initial positive list has not been finalised.

- Legal framework for imports are the same across the European Community
- The Community has approved third country facilities
- Imports of irradiated dried aromatic herbs, spices and vegetable seasonings are allowed
  - Directive 1999/3/EC – the positive list
- However, some EU countries can allow other foods
  - In line with Article 4 of 1999/2/EC
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Summary

- Legislation
  - European Directives 1999/2/EC & 1999/3/EC

- The approval process
  - Irradiation facilities in third countries can be EC Approved
  - Inspection (Food and Veterinary Office)

- Importation
  - treated at Community Approved facilities
  - documentation
  - dried herbs, spices and vegetable seasonings
  - Some countries can allow others (e.g. UK)
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