

INTERNATIONAL REGULATORY ACTIVITIES

European Union

Food Irradiation Directives (1999)

On 22 February 1999, the European Parliament and the Council adopted Directive 1999/2/EC on the approximation of the laws of the Member States concerning foods and food ingredients treated with ionising radiation and Directive 1999/3/EC on the establishment of a Community list of foods and food ingredients treated with ionising radiation. The deadline for Member States to implement these Directives under domestic law was set for 20 September 2000.

These Directives aim to mitigate differences between national laws relating to the treatment of foodstuffs by ionising radiation and its conditions of use.

Directive 1999/2/EC establishes the conditions which must be fulfilled for authorisation of the treatment of foodstuffs with ionising radiation. Irradiation must:

- be justified and necessary from a technological point of view;
- present no health hazard and be carried out under the conditions proposed;
- be of benefit to the consumer;
- not be used as a substitute for hygiene and health practices or for good manufacturing or agricultural practice.

In addition, food irradiation may be used only for the following purposes:

- to reduce the incidence of food-borne disease by destroying pathogenic organisms;
- to reduce the spoilage of foodstuffs by retarding or arresting decay processes and destroying spoilage organisms;
- to reduce the loss of foodstuffs by premature ripening, germination or sprouting;
- to rid foodstuffs of organisms harmful to plants or plant products.

Irradiation may only be carried out in approved irradiation facilities and by gamma rays from radionuclides ^{60}Co or ^{137}Cs , X-rays generated from machine sources operated at or below a nominal energy level (maximum quantum energy) of 5 MeV, or electrons generated from machine sources operated at or below a nominal energy level (maximum quantum energy) of 10 MeV.

Furthermore, any food irradiated as such or containing irradiated food ingredients has to be labelled.

Under the Directives, only dried aromatic herbs, spices and vegetable seasonings may be treated with radiation at the European level. However, a requirement was introduced in Directive 1999/2/EC that the Commission must forward a proposal by 31 December 2000 to complete the Community positive list of foodstuffs which may be treated with ionising radiation. Until this positive list is completed, Member States can maintain existing national authorisations for the irradiation of certain foodstuffs and can continue to apply existing national restrictions or bans.