

Foods and food ingredients treated with ionising radiation. Framework Directive

1988/0169A(COD) - 14/11/2012 - Follow-up document

This report on food and food ingredients treated with ionising radiation covers the period 1 January to 31 December 2011. It gathers together the information forwarded to the Commission by 25 Member States. Bulgaria and Malta did not supply any information.

In accordance with Directive 1999/2/EC of the European Parliament and of the Council, the Member States shall transfer to the Commission each year: (a) the results of checks carried out in irradiation facilities, in particular regarding the categories and quantities of food and food ingredients treated and the doses administered and (b) the results of checks carried out at the product marketing stage and the methods used to detect treatment with ionising radiation.

According to Directive 1999/2/EC, food and food ingredients may be irradiated only in approved irradiation facilities. For facilities in the EU, approval is given by the competent authorities of the Member States.

Irradiation of food and food ingredients may only be carried out by means of the following sources: (a) gamma rays from radionuclides ^{60}Co or ^{137}Cs ; (b) x-rays generated from machine sources operated at or below a nominal energy (maximum quantum energy) level of 5 MeV; (c) electrons generated from machine sources operated at or below a nominal energy (maximum quantum energy) level of 10 MeV.

The following are the **main conclusions** of the report:

- In 2011, 24 approved irradiation facilities were operational in 13 Member States in accordance with Article 7(2) of Directive 1999/2/EC. No new irradiation facilities have been approved. No approved irradiation facilities have been closed. Five irradiation facilities did not irradiate any food during 2011 (no data was submitted for the two facilities in Bulgaria).
- A total quantity of 8 067.5 tonnes of products were treated with ionising irradiation in the Member States, 90.45 % of which were irradiated in three Member States: Belgium (62.36%), the Netherlands (19.48%) and France (8.61%). The three biggest fractions within the irradiated categories are frog legs (48.52%), poultry (19.89%) and dried aromatic herbs and spices (14.98%).
- There has been a slight decrease in the total quantity of products irradiated in the EU compared to 2010 (9 263.4 tonnes). In France, there was a significant reduction in the quantity of dried aromatic herbs, spices and vegetable seasonings as well as in the quantity of poultry meat treated with ionising radiation: 65% and 75% respectively. In the Netherlands, there was a 2.85% increase in the total quantity of products treated with ionising radiation, mainly due to a sharp increase of the quantity of egg whites irradiated in 2011.
- 25 Member States submitted information regarding the checks carried out at the product marketing stage. One Member State did not perform any analytical checks in official control and inspection due to the fact that it does not have laboratories to carry out the analysis and that sending samples to be analysed abroad would be too expensive.
- A total of 5 397 samples have been analysed by 24 Member States, three Member States accounted for 67.4% of the samples (Germany 54%, Italy 7.8%, and the Netherlands 5.6%). 5 232

samples (97%) were compliant with the provisions of the Directives, 105 samples (2%) were non-compliant, 60 samples (1%) gave inconclusive results.

- Reasons for inconclusive results are most often related to non-confirmation after positive results from screening tests and/or to the difficulty to determine which of the ingredients were irradiated, even if they are labelled, in composed foodstuffs. The two main reasons for non-compliance of tested samples are incorrect labelling and forbidden irradiation; non-compliance is also due to irradiation in facilities not approved by the EU.