

15 Annex - Energy

**80. RULEBOOK ON CONDITIONS FOR MARKETING OF
FOODSTUFFS AND ITEMS OF GENERAL USE PRESERVED
BY IONISING RADIATION**

RULEBOOK ON CONDITIONS FOR MARKETING OF FOODSTUFFS AND ITEMS OF GENERAL USE PRESERVED BY IONISING RADIATION

Article 1

Foodstuffs and items of general use as defined under this Rulebook may be preserved by ionising radiation so as to prolong their durability and maintain their health safety and these may be marketed provided that

1) they are included in the List I – Foodstuffs and Items of General Use That May Be Preserved by Ionising Radiation and Maximum Allowed Radiation Doses;

2) they are not organoleptically or chemically modified due to activity of micro-organisms

3) they are not secondary contaminated with micro-organisms due to poor hygienic-sanitary conditions of processing, transportation and storage;

4) irradiation does not alter nutritive value of foodstuffs, nor physical, chemical and organoleptic properties specific for a certain foodstuff i.e. item of general use;

5) after being irradiated, they still conform with regulations on quality and health safety for that type of products;

6) irradiation procedure is conducted in compliance with the provisions hereof.

The List I attached to this Rulebook forms an integral part thereof.

Article 2

Foodstuffs and items of general use may be preserved by ionising radiation solely for the sake of achieving the effects given in column 3 of the List I (purpose of irradiation) and with a dose of irradiation which is the lowest absorbed dose sufficient for achieving the desired effect and which may not exceed the upper limit given in column 4 of the List I (maximum allowed radiation doses).

A maximum allowed radiation dose corresponds to the total mean absorbed radiation dose in a foodstuff and in an item of general use and it equals arithmetic mean of the minimum and maximum allowed dose. The difference between the minimum and the maximum absorbed doses may not be greater than the difference of the minimum required dose for achieving the irradiation effect and the maximum allowed dose.

Article 3

Foodstuffs and items of general use from the List I may be preserved as follows:

1) by gamma rays of radionuclides ^{60}Co and ^{137}Cs ;

2) by Roentgen's X-rays from devices that operate at the power level of 5 MeV or less;

3) by electrons generated in devices that operate at the power level of 10 MeV or less.

Article 4

Foodstuffs and items of general use may be irradiated only once in the manner as provided under Articles 2 and 3 hereof, except foodstuffs with low moisture content (cereals, leguminosae, dehydrated foodstuffs and alike), which are irradiated with low doses of radiation for the purpose of disinsection, however the total absorbed dose may not exceed 10 kGy.

Article 5

The following foodstuffs are not considered as repeatedly irradiated foodstuffs:

1) a foodstuff prepared from ingredients which have been irradiated in the preceding procedure by absorbed doses lower than 1 kGy, which is being irradiated for other technological purposes;

2) a preserved foodstuff that contains less than 5% of ingredients irradiated in the preceding procedure;

80. RULEBOOK ON CONDITIONS FOR MARKETING OF FOODSTUFFS AND ITEMS OF GENERAL USE PRESERVED BY IONISING RADIATION

3) a foodstuff on which a radiation dose for achievement of desired effect has been multiply applied as part of a single procedure, however the total absorbed dose in the foodstuffs may not exceed 10 kGy.

Article 6

Foodstuffs and items of general use in their original package which have been preserved by ionising radiation shall contain in their respective declarations a designation of radiation preservation or an information on some other purpose of irradiation, the date of preservation and the name of the legal entity which executed preservation by ionising radiation.

The foodstuffs referred to in the paragraph 1 of this Article which are in bulk shall contain the data referred to in the above said paragraph in the accompanying documentation.

The provision from paragraph 1 of this Article does not apply to products that contain in their composition up to 5% of components added by means of ionising radiation.

Article 7

Ionising radiation of foodstuffs and items of general use may be performed by authorised legal entities and authorised experts in these legal entities appointed by the Federal Minister of Labour, Health and Social Policy.

Article 8

The legal entity engaged in preservation of foodstuffs and items of general use by ionising radiation shall have the documentation and keep the records for each individual series of products, including

- 1) name of the product and its trade name if applicable;
- 2) name and address of the manufacturer, i.e. the enterprise which packs or sells the product, and name and address of the owner of the product;
- 3) product series number;
- 4) keeping and storage conditions with an authorised legal entity that performs irradiation of products;
- 5) data on quality and health safety of the product prior to irradiation, which should be provided by the party that ordered the irradiation service;
- 6) data on the optimum dose required to achieve irradiation effect;
- 7) type of packaging used during irradiation;
- 8) date of irradiation, name and surname of the person responsible and authorised for irradiation;
- 9) data on plant operation and process control, including also the results of the dosimetry control;
- 10) other data that can be of importance for evaluation of the irradiated product.

Supervision over determination of the optimum dose of irradiation shall be performed by an operative with a university degree – a specialist for radiation chemistry in co-operation with a specialist for microbiology of foodstuffs, employed (or working) in an authorised organisation for performance of super-analyses of foodstuffs and items of general use.

Article 9

The Rulebook on Conditions for Marketing of Foodstuffs and Items of General Use Preserved by Radiation (Official Gazette of the Socialist Federal Republic of Yugoslavia 68/84) shall be repealed on the day of entry into force of this Rulebook.

Article 10

80. RULEBOOK ON CONDITIONS FOR MARKETING OF FOODSTUFFS AND ITEMS OF GENERAL USE PRESERVED BY IONISING RADIATION

This Rulebook shall enter into force on the eighth day following that of its publication in the Official Gazette of the Federal Republic of Yugoslavia.

No. 3/1-02-002/98

19 August 1998

Belgrade

Federal Minister of Labour, Health and Social Policy

Dr **Miodrag Kovač**, sgd.

80. RULEBOOK ON CONDITIONS FOR MARKETING OF FOODSTUFFS AND ITEMS OF GENERAL USE PRESERVED BY IONISING RADIATION

List I

FOODSTUFFS AND ITEMS OF GENERAL USE THAT MAY BE PRESERVED BY IONISING RADIATION AND MAXIMUM ALLOWED RADIATION DOSES

<i>Ordinal number</i>	<i>Foodstuffs and items of general use</i>	<i>Purpose of irradiation</i>	<i>Maximum allowed radiation dose (kGy)</i>
1	2	3	4
1.	Cereals	destruction of insects	1
2.	Milled cereals products	destruction of insects decontamination*	1 10
3.	Leguminosae	destruction of insects	1
4.	Milled leguminosae products	destruction of insects decontamination	1 10
5.	Dehydrated fruits and vegetables, dried mushrooms	destruction of insects decontamination	1 10
6.	Onion and garlic, potato	prevention of germination	0.15
7.	Teas and powdered tea extracts	destruction of insects decontamination	1 10
8.	Spices and mixtures of spices	destruction of insects decontamination	1 10
9.	Powdered whey and yoghurt	decontamination	2
10.	Powdered caseinate Na-	decontamination	6

80. RULEBOOK ON CONDITIONS FOR MARKETING OF FOODSTUFFS AND ITEMS OF GENERAL USE PRESERVED BY IONISING RADIATION

11.	Powdered eggs	decontamination	3
12.	Fish and fish products	destruction of insects	1 2.2
13.	Chicken meat	decontamination, extension of shelf life	3
14.	Dehydrated products from blood of slaughtered animals	decontamination	8
15.	Gum arabic	decontamination	10
16.	Dehydrated enzyme preparations	decontamination	10
17.	Substances for maintenance of personal hygiene, care and beauty enhancement products for face and body	decontamination	10
18.	Packaging for foodstuffs	decontamination	25

*bacterial (radiopasteurisation, radiosterilisation)