

Standard for Foods Treated with Ionising Radiation

DOH Food No. 88057077 Announced, 29 September 1999
MOHW Food No. 1021350146 Amended , 20 August 2013
MOHW Food No. 1121302275 Amended, 19 January 2024

Article 1

This Standard is prescribed in accordance with the provisions of Article 17 of the Act Governing Food Safety and Sanitation.

Article 2

This standard shall apply to processing of food to achieve the purpose of inhibiting germination or sprouting and microorganisms through treated with ionising radiation.

Article 3

Food may be treated by the following sources of ionising radiation and its maximum energy level:

1. Gamma(γ) rays from radionuclides Co-60.
2. X-rays generated from machine sources: at or below of 5 MeV.
3. Electrons generated from machine sources: at or below of 10 MeV.

Article 4

Food category that can be irradiated, its absorbed dose limit and the purpose of irradiation, shall comply with the provisions listed in the Appendix Table.

Article 5

The Standards shall be implemented from the date of promulgation.

Appendix Table

Food categories with restricted exposure	Absorbed dose limit (kGy) *	Purpose of irradiation
Potato, sweet potato, scallion, onion, garlic, ginger	0.15	Inhibited germination or sprouting
Frozen fresh poultry, mechanically deboned poultry	5	Extension of shelf-life; Destroying pathogenic organisms
Chilled fresh poultry	4.5	Extension of shelf-life; Control the growth of <i>Trichinella spiralis</i>
Frozen fresh meat	7	Extension of shelf-life; Control the growth of <i>Trichinella spiralis</i>
Dried or dehydrated seasoning plants (includes herbs, seeds, spices, teas, vegetable seasonings)	30	Sterilization
Pollen	8	Extension of shelf-life
Seasonings of animal origin	10	Extension of shelf- life

* Absorbed dose refers to the mean energy imparted by radiation per unit mass of material. The special name for the unit of absorbed dose is kilogray (kGy). One joule imparted per kilogram of mass is one gray.