Dose Limits Indices Concerning Radioactive Materials in Foods

Radionuclide	Japan	Codex Alimentarius Commission	EU	US
Radioactive cesium (Bq/kg)	Milk 50 Infant foods 50 General foods 100	Infant foods 1,000 General foods 1,000	Milk 1000 Infant foods 400 General foods 1,250	All foods 1,200
Upper limits for additional doses	1mSv	1mSv	1mSv	5mSv
Assumed percentages of foods containing radioactive materials	50%	10%	10%	30%

* The Codex Alimentarius Commission is an intergovernmental body created in 1963 by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) for the purpose of protecting consumers' health and ensuring fair-trade practices in the food trade, etc.; The Commission establishes international standards for foods.

* Standard limits incorporate effects of the amount of food intake and assumed percentages of foods containing radioactive materials. Therefore, the values are not suitable for inter-comparison.

* Indicated standard limits for drinking water are the WHO guidance levels of radioactive materials, which are referred to in respective countries, and standard limits for radioactive materials vary by country due to differences in adopted preconditions. Therefore, the values are not suitable for inter-comparison.

Source: Modified "Food and Radiation Q&A" published by Consumer Affairs Agency

In Japan, the new standard limits for radionuclides in foods were established and were put into force on April 1, 2012. Under the new standard limits, foods are classified into four categories, and the standard limit for drinking water, which people take most frequently, was set at 10 Bq/kg.

The standard limit for general foods was set at 100 Bq/kg. However, for "infant foods" consumed by infants under one year old and for "milk" whose intake by children is extremely high, the standard limit was set at 50 Bq/kg, respectively.

All foods other than infant foods were categorized as general foods based on the idea to minimize gaps in additional doses caused by differences in individuals' eating habits. The value was set with sufficient room to ensure safety no matter what foods people eat as long as radioactive Cs concentrations therein are within the standard limit.

Regulation values vary by country due to differences in annual exposure dose limits based on which the respective countries set their standard limits and in contamination rates in foods, etc. (In Japan, regulation values were set on the safe side based on the annual exposure dose limit of 1 mSv and on the assumption that 50% of general foods and 100% of milk and infant foods are contaminated. On the other hand, the Codex Alimentarius Commission specifies the annual exposure dose limit as 1 mSv and assumes that 10% of foods are contaminated.)

(Related to p.53 of Vol. 2, "Standard Limits Applied from April 2012," p.59 of Vol. 2, "Approach for the Calculation of the Standard Limits (1/2)," and p.60 of Vol. 2, "Approach for the Calculation of the Standard Limits (2/2)")

Included in this reference material on March 31, 2013 Updated on March 31, 2020