

Is radiation from food safe?

Let's learn about radiation from food and radiation-related food inspections.

Editor's note: Herein, “radiation” refers to ionizing radiation.

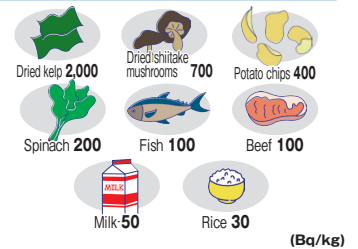


Do we also receive radiation from food?

● Radioactive materials in food emit radiation.

Food contains natural radioactive materials. A typical example is the element potassium (K), a fraction of which is radioactive (K-40). Potassium, an essential element for all living organisms, is contained in most foods, and because a fraction of it is radioactive, we regularly consume - and excrete - radioactive potassium.

Amounts of radioactive potassium in food



Based on BOOKLET to Provide Basic Information Regarding Health Effects of Radiation published by the Ministry of the Environment(FY2019)



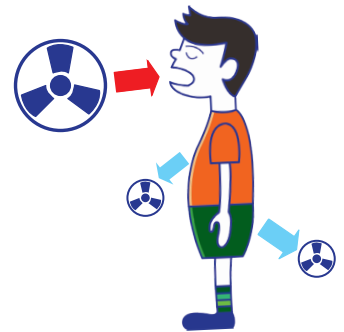
Do the radioactive materials taken into the body remain in the body?

● Radioactive materials exit the body in urine and feces.

Radioactive materials taken into the body exit the body, mainly in urine and feces.

The radioactive material in food that has drawn the most attention since the nuclear power plant accident is cesium (Cs-134 and Cs-137). In the case of adults, a dose of cesium taken into the body is halved in about 100 days*.

* The period required to halve varies depending on age; the younger the person is, the shorter the period required to halve.

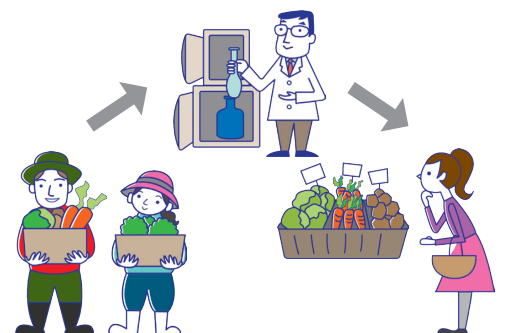


I am concerned about the safety of food since the nuclear power plant accident ...

● Inspections continue even today to ensure that only safe food is distributed.

For radioactive materials in food, standard limits are specified and maintained. Due to thorough inspections, foods exceeding the standard limits are not distributed for sale.

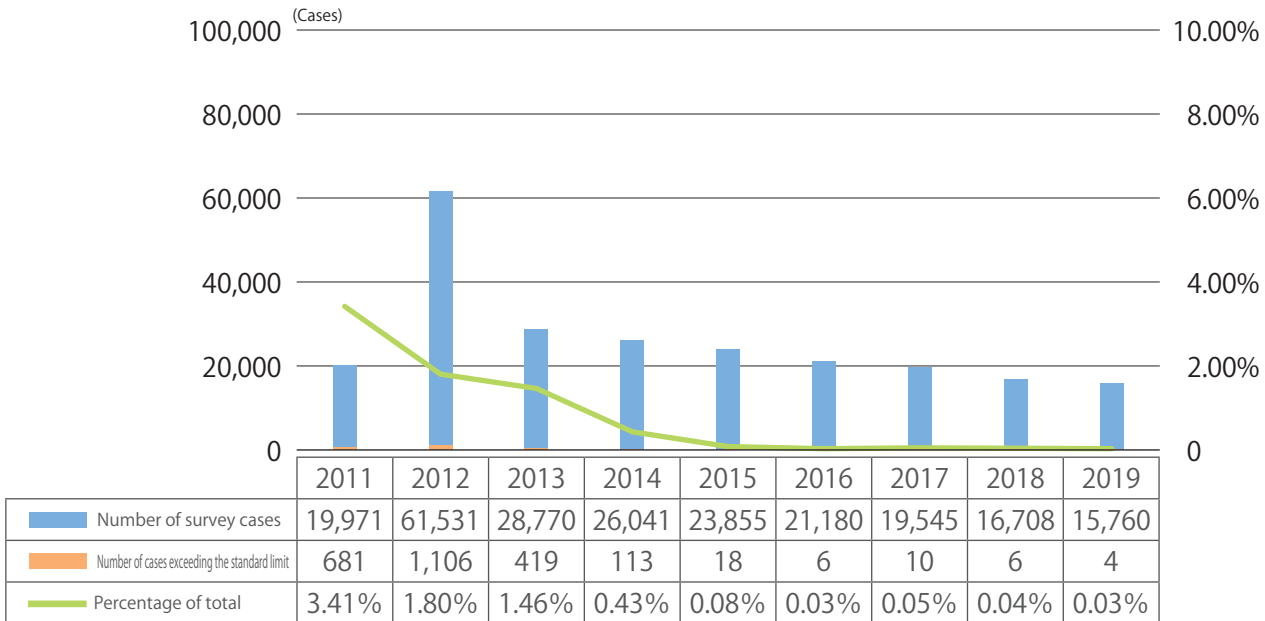
Today, there are very few foods that exceed the standard limits, but some foods are still subject to restrictions on shipment and intake.



Change in monitoring results of agricultural, forestry, and fishery products from Fukushima Prefecture

Fukushima Prefecture carries out monitoring surveys of agricultural, forestry, and fishery products.

In the nine years from FY2011 to FY2019, the percentage of cases that exceeded the standard limit of radioactive cesium in foods with respect to the total number of survey cases has steadily decreased.

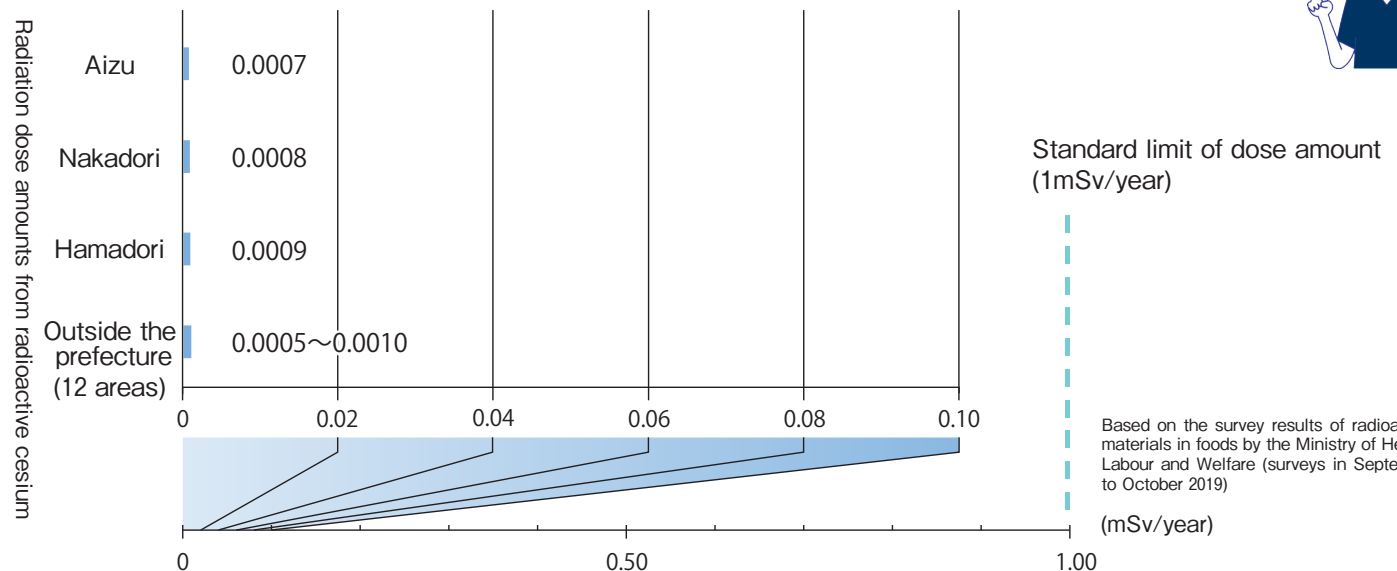


* Some cases exceeding the standard limit in FY2011 and FY2012 are those exceeding a provisional regulation value.

Based on the change in the number of monitoring survey cases and results of agricultural, forestry, and fishery products from Fukushima Prefecture

Radiation dose amounts from food (annual)

Surveys (market basket method*) of likely doses from radioactive cesium in foods estimated annual exposures of 0.0007 to 0.0009 mSv in Fukushima Prefecture. This amounts to approximately 0.1% of the standard limit of 1 mSv, and is extremely small.



Radiation dose amounts in foods are continuously surveyed and the results are publicly announced. If you're interested, take a look!



Safety of Water and Food, at "Fukushima Revitalization Station"

* Market basket method

Survey method by which the amount of daily intake is estimated by purchasing foods sold at supermarkets, etc., to analyze and measure the radioactive materials contained in them.



Publisher: Fukushima Medical Association

Editorial supervision: Radiation Medical Science Center for the Fukushima Health Management Survey, Fukushima Medical University

©The contents of this leaflet can also be seen on our website.

