Measures for Radioactive Materials in Foods

Approach for Applying Standard Limits for Drinks and Dried Foods [Reference]

Standard limits for radioactive materials
10 Bq/kg
The standard limit for drinking water is applied.
100 Bq/kg The standard limit for general foods is applied to barley as ingredient.
100 Bq/kg The standard limit for general foods is applied to the products in drinkable form.
50 Bq/kg The standard limit for milk is applied.
100 Bq/kg The standard limit for general foods is applied to the products in powder form.
100 Bq/kg The standard limit for general foods is applied to the final products.
100 Bq/kg The standard limit for general foods is applied to the final products.

The table shows part of the standard limits for radioactive materials applied to drinks, condensed foods, and dried foods such as powdered soups that are served by dissolving them in cold or hot water. The details of each category are as follows.

- Green tea: Non-fermented tea that is made from leaves of tea plants, including *sencha* (ordinary green tea) and its equivalents—*gyokuro* (refined green tea), roasted green tea, brown rice tea (green tea with roasted brown rice)
- Matcha tea and other powdered tea (tea made by grinding tea leaves): This type of tea is ingested in powder form, not as liquid tea obtained by brewing tea leaves and is used as an ingredient for foods like ice cream. Therefore, the standard limit for general foods is applied to this type of tea in powder form.
- Dried foods: For some dried foods, the standard limit for general foods is applied to foods both in dried form and in edible form (reconstituted form). "Dried foods" refers to dried mushrooms, vegetables, and seafood, including sea weeds.
- Dried mushrooms: Dried mushrooms listed in the Japan Standard Commodity Classification (JSCC), including *shiitake* mushrooms (*Lentinula edodes*), and *kikurage* mushrooms (*Auricularia polytricha*).
- Dried vegetables: Dried vegetables listed in the JSCC, including gourd shavings, Japanese radish, fiddleheads (Osmunda japonica), brackens (Pteridium aquilinum), and taro stems. Products in flake form and in powder form are excluded.
- Dried seaweeds: Processed seaweeds listed in the JSCC, including dried kelp, dried wakame (Undaria pinnatifida) products, dried hijiki (Sargassum fusiforme), dried arame (Eisenia bicyclis), agar.
- Dried seafoods: Open-air dried seafoods listed in the JSCC, including fully dried herring fillets, cod fillets, and shark fins; as well as dried boiled-seafoods listed in the JSCC, including abalone and sea cucumbers.
- Dried shiitake mushrooms: Basically, tests are conducted using ground samples to which an adequate amount of water is added. The amount of added water is based on the data (weight change rate)— made public in the Standard Tables of Food Composition in Japan—of the water taken into dried mushrooms as the result of reconstitution. As water used for reconstitution is often used as soup stock in Japan, the amount of radioactive materials migrating from dried mushrooms into the water needs to be determined. This method is equivalent to the testing being conducted by considering the amount of radioactive materials migrating from the samples into the water.
- Concentrated fruit juice: For fruit juice that is distributed in concentrated form for the purpose of transportation and that is surely reprocessed into diluted form at processing facilities before being sold for unspecified persons, the standard limit is basically applied to the products obtained by being diluted to the state of original fruit juice, based on the concentration factor. This is because such concentrated fruit juice is unlikely to be served for human consumption as is.

These standard limits are compiled in the "Q&As on the Setting of Standard Limits for Radioactive Materials in Foods" by the Ministry of Health, Labour and Welfare. (in Japanese)

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