

To All Concerned in Overseas

Message from chairperson of Food Safety Commission of Japan (FSCJ) - About the assessment of the effect of food on health of radioactive nuclides in foods –

1. Regarding radioactive contamination of food associated with the accident at Fukushima Dai-ichi Nuclear Power Station, the Ministry of Health, Labour and Welfare (MHLW) adopted *Indices for Food and Beverage Intake Restriction* as provisional regulation values, and management measures based on that values have been taken since March 17, 2011.

These provisional regulation values were established urgently without an assessment of the effect of food on health by FSCJ; thus, on March 20, 2011, the Minister of Health, Labour and Welfare requested FSCJ for the assessment, and FSCJ complied “Emergency Report on Radioactive Nuclides in Foods” on March 29, 2011. In that Emergency Report, a detailed study on carcinogenesis of radioactive materials, fetal effects, assessment of uranium and other radioactive nuclides in accordance with exposure condition and other issues remained as outstanding tasks for us.

Therefore, since April 21, 2011, “Working Group (WG) for an assessment of the effect of radioactive nuclides in food on health” with experts on radioactive materials has had in-depth and meticulous deliberation. To conduct the deliberation in an objective, neutral, and fair manner on the basis of scientific knowledge, the WG analyzed not only existing assessments conducted by international authorities, but also got back to references cited in those assessments. The WG verified about 3,300 literatures, which comes to in total approximately 30,000 pages. After nine meetings and deliberation the WG concluded this assessment draft, and is going to proceed with public comment. From now, after hearing opinions from the public, we will be finalizing this assessment. Also we are eager to conduct risk communication on exposition of this conclusion to make all the public fully understand this assessment.

2. As it’s described in this assessment Chapter XIII, the WG concludes that: more than around 100 mSv of cumulative effective dose of radiation during lifetime, which is additional dose to the dose people receive in ordinary life, could increase the risk of effect on health. It was pointed out that children may be more sensitive than adults for developing thyroid cancer and leukemia.

Basically FSCJ conducts the assessment of the effect of *food* on health, so this around 100 mSv was assumed amount which people receive additionally through only foods. However, literatures which served as the basis for this “around 100 mSv” did hardly comprehend the data on health effect by oral ingestion of radioactive materials, therefore it was difficult to conduct the assessment based on solely the data of oral ingestion. Consequently, for assessing we analysed actual epidemiological data on exposure includes both external and internal.

Around 100 mSv of cumulative effective dose of radiation is considered as, based on statistical data, if the total of additional dose during lifetime exceeds this amount, it may increase the probability of health effect caused by that cumulative dose. Around 100 mSv was assessed as conservative as well as rough value based on major-scale epidemiological studies.

The numerical data on the minimum dose which determinably affects on health was considered to have diverse conclusions, however needless to say this amount was determined after carefully examining those data. It is risk managing ministries' role to distribute this approximately 100 mSv of cumulative effective dose to annual dose.

3. By “Emergency Report on Radioactive Nuclides in Foods” which FSCJ published on March 29, 2011, we showed our view for emergency situation. Therefore this assessment report which indicates cumulative dose does not contradict the view of the Emergency Report. In emergency situation more flexible countermeasures may be taken.

4. The WG deliberated health effect arising from radiation doses at below 100 mSv, however the WG reached a conclusion: it's not possible to verify the health effect. Because there is a limitation to verify the health effect arising from additional radiation exposure including carcinogenesis and other influences since; there is a difficulty to distinguish explicitly the effect of radiation and other effects; population of epidemiological studies were not large enough and; inaccuracy of estimated radiation exposure. Therefore, 100 mSv can not be threshold level, because threshold value is a level at which a substance starts causing toxicity, although it is nontoxic under that level.

5. This assessment is not drawing a plain line to show “until what mSv through foods produce no health concern.” However, I would indeed like for everyone to understand that FSCJ, as independent commission which conducts an assessment of the effect of food on health in a neutral manner on the basis of scientific knowledge, tried to indicate all knowledge as far as we could reach to explain what is evident and what is not evident at this time. After hearing public comments, this draft will be finalized. I hope appropriate management measures will be taken by risk managing ministries in accordance with FSCJ's assessment, the situation of detected radioactive materials in food and the actual food intake of Japanese people.

2011 July 26

Chairperson
Food Safety Commission of Japan
Naoko Koizumi