Dose Reduction

Reduction of Internal Exposure

- Prevent radioactive materials from entering the body through the mouth, nose or wounds, in principle.
- Wash off soil immediately from the body, shoes and clothes.
- Be aware of the information on the release and pollution of radioactive materials.
- Be careful not to lose nutritional balance, being excessively worried about a small amount of radioactive materials below the standard limit.

As causes of internal exposure, both intake through inhalation and oral intake through ingestion of foods and drinks need to be taken into consideration. After a nuclear disaster, radioactive materials remaining on the ground pose a problem, but intake through inhalation of resuspended radioactive materials is scarce. Proper daily hygienic control (such as washing hands and taking a bath, etc.) is also effective in reducing internal exposure.

In the meantime, regarding the possibility of internal exposure caused by ingestion of foods, attention needs to be paid to foods from which radioactive cesium is detected at high levels. In particular, special attention is required for ferns and mushrooms, which have a property to concentrate cesium. In the aftermath of a nuclear disaster, radioactivity concentrations in foods are inspected by individual prefectures based on inspection plans they formulate in light of the inspection items and the system presented by the national government. Inspection results are released via the websites of the Ministry of Health, Labour and Welfare, the Ministry of Agriculture, Forestry and Fisheries, and individual local governments (p.54 of Vol. 2, "Publication of the Inspection Results Concerning Radioactive Materials in Foods").

Internal exposure due to radioactive cesium can be measured with a whole-body counter (WBC). Some local governments and private hospitals, etc. provide opportunities for checking internal exposures using WBCs.

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