

# Radiation

and

# Food



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## Summary

As a result, we found that despite taking radioactive rays all day.

We have been keeping healthy by decreasing radioactive material in our bodies.

As long as we are living, we can't eliminate radiation exposure.

But, if we know the risks of radiation, we can lower the risk of becoming irradiated.

## Issue

We'd like to find out what food grown in certain environments contains radiation.

## Purpose!

- We will learn about radiation and get the correct information.
- We will learn about immediate exposure effects.

## Motive

When we researched many books and the Internet, we learned that humans are going through "radiation" exposure every day.

Exposure is both internal and external.

➔ Focus on internal exposure!

Because we think our bodies are taking food inside our bodies.



## 1 What are radioactive rays?

Radioactive rays are formed from light. It is energy from an atom's nucleus. Taking too many rays can do harm to you. → cancer, leukemia

A substance that is radioactive is called a radioactive material.



## 2 What is radiation exposure?

Radiation exposure can be divided into two parts.

### • External exposure -

To receive radiation from outside of the body.

### • Internal exposure

To receive radiation from radioactive materials in the body.

It happens by drinking, eating or in haling something that has radioactive material.

## 3 Is radioactive material included in food?



Food such as grain vegetables and meat contain natural radioactive material, They cause internal exposure in our body. Potassium is a radioactive material.

But, It is necessary for our body to take it.



### ► Examples



dried kombu

cowmeat

milk

rice

## 4 Does radioactive material accumulation in our body decrease?

There is radioactive material in our body. It decreases by halves. This is called half-life.

kind	half-life
sodium(Na)	15 hours
iodine(I)	8 days
cesium(Cs)	2.1 years
potassium <sup>40</sup> (K)	13 hundred million years

Radioactive material deteriorates differently depending on the different substances. There are long half-lives and small half-lives that decrease gradually over time.

