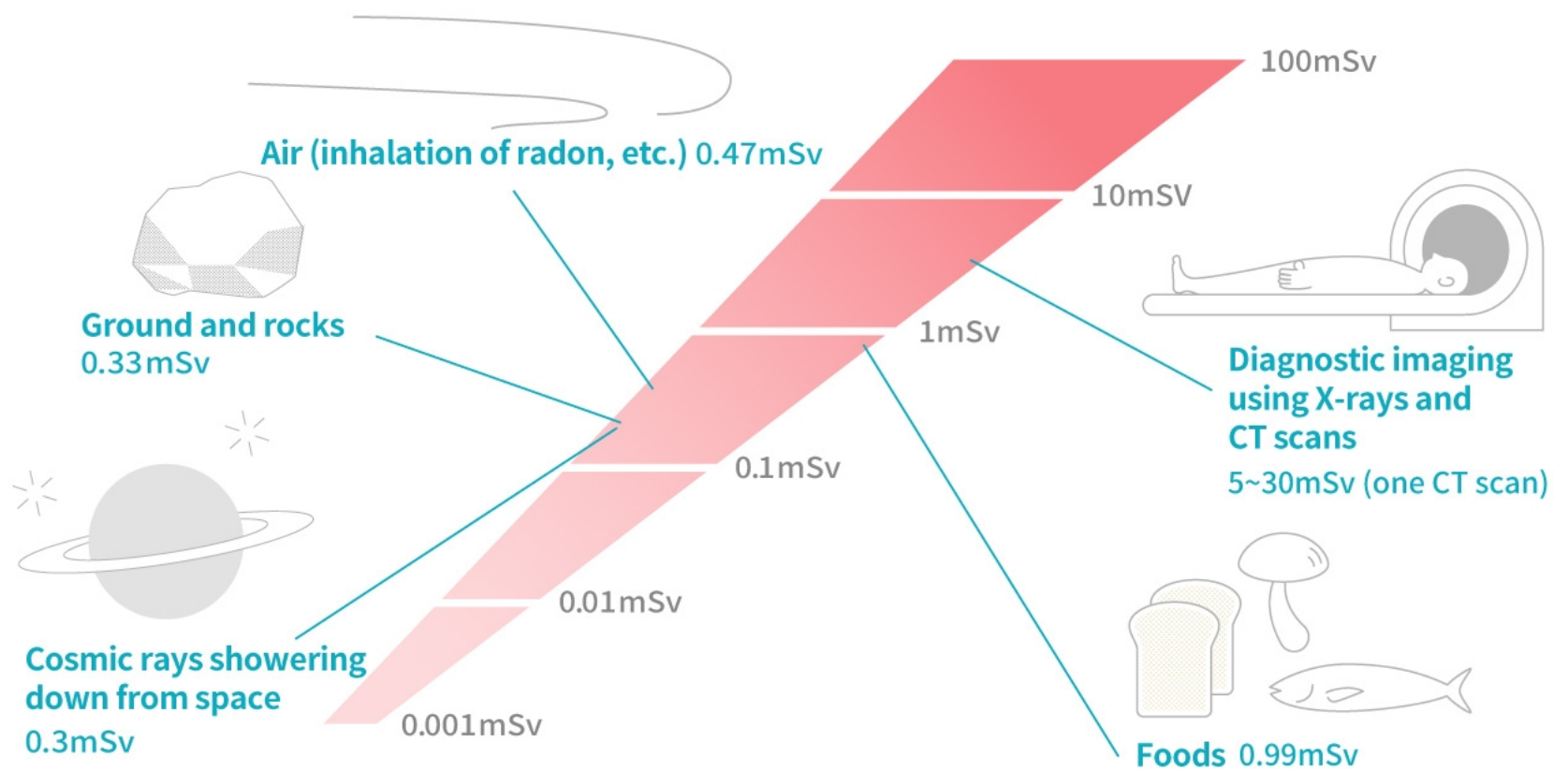


# What is radiation?



Source: Made with reference to “The dose scale of radiation exposure” published by the National Institutes for Quantum Science and Technology

Radiation refers to the energy released as particles and electromagnetic waves from radioactive materials. A property of this energy is its ability to pass through materials. Substances that give off radiation are referred to as “radioactive materials,” and “radioactivity” describes its ability to emit radiation. To use a flashlight as an example, think of radiation as the light, radioactivity as the ability to produce the light, and the flashlight that emits the light as the radioactive material.

Radiation also occurs in nature, and we have always surrounded by radiation. For example, there are cosmic rays that shower down from space and radiation emitted from the ground and rocks. And there are even small amounts of radiation in the air and the food we eat that we absorb this radiation into our bodies every day.

In today’s world, radiation is utilized in a wide range of fields. In the medical field, it is used for X-rays to diagnose and treat cancer, while in the industrial field, it helps inspect the inside of products. Radiation is also used in agriculture to cultivate crops and improve breeding.