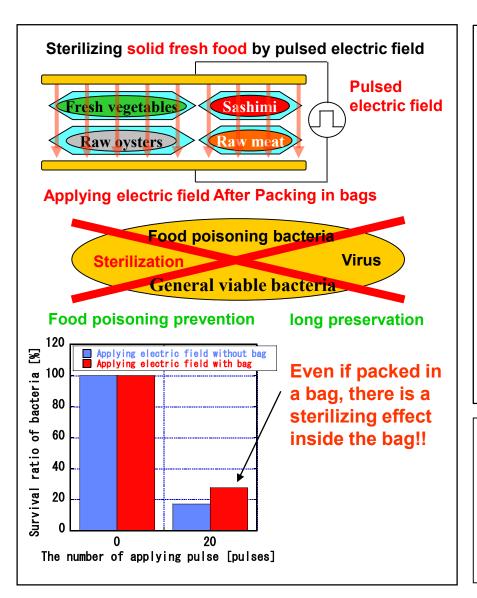
Non-Thermal Method for Sterilization of Fresh Food Using Pulsed Power Associate Professor Yasushi Minamitani



Content: Currently, heat sterilization is widely used for food sterilization. However, the heat sterilization cannot be applied to sterilization of fresh foods. Even if it can be sterilized, it will greatly change the flavor. Also, there are treatments using chemicals. However, there is a problem of chemical residue. Even in the case of the fresh foods, food poisoning by bacteria and adhesion of viruses are problems, and sterilization is desired. In addition, sterilizing the fresh foods after packing in bags can only be done by the heat sterilization that changes the flavor.

Therefore, we are conducting research on a new non-heated pulse electric field sterilization method that can suppress the growth of various bacteria without changing the flavor of the fresh foods and even when packed in the bags. By using the new pulse electric field sterilization method, it is possible to realize a sterilization device that prevents food poisoning and enables long-term storage for fresh foods.

Appealing point: In some cases, problems in fields that seem to have nothing to do with electricity can be solved by electricity. I am studying to solve problems in any field by electricity.

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Research Interest : Pulsed power, plasma,

Bioelectrics

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