

***Bacillus cereus* does not grow in sake or during its manufacture**

Sake has long been recognized as the safe product free from microbiological hazard. However, amid the consumers' growing concern over food safety, the discussion about the food safety on scientific basis is important for consumers' reassurance. Recently, several studies have reported the presence of spores of *Bacillus cereus* in sake. Accordingly, to confirm the microbiological safety of sake, we investigated the content and growth of *B. cereus*. First, we examined whether *B. cereus* spores grew during sake production process through a spore addition test; consequently, we observed no growth or germination of *B. cereus* spores during sake production process. Next, we conducted a survey to assess the density of *B. cereus* in various commercial sake products; consequently, we found that the density of these bacteria in sake is less than in other foods and not enough to be infectious, and the emetic toxin produced by *B. cereus* was not detected in any sake samples. Therefore, we concluded that the safety risk of *B. cereus* in sake is negligible.

[Explanation of terminology]

Bacillus cereus

Bacillus cereus is a spore-forming bacterium that is commonly found in soil, on vegetables, and in many raw and processed foods (10^1 – 10^3 /g). Food poisoning of *B. cereus* is mostly associated with a bacterial cell density at minimum 10^5 /g in food; thus small amounts of *B. cereus* result in a low risk of food poisoning.

B. cereus cannot grow in sake or during the sake manufacturing process; hence, there is a low risk of food poisoning by *B. cereus* in sake.

Bacillus cereus does not grow in sake or during its manufacture

Several studies reported the presence of *B. cereus* spores in sake



We investigated the growth of *B. cereus* in sake and confirmed its safety for consumers.

