

FOOD PROCESSING LINES. ROLE IN THE FOOD CONTAMINATION WITH *BACILLUS* SPORES

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ABSTRACT

Bacillus strains have been previously shown to be able to sporulate in biofilms. In order to estimate if biofilms could be a significant source of food contamination with spores, we investigated the ability of *Bacillus* strains to form biofilms. Most of the tested strains were able to form biofilms. We then analyzed four biofilm-producing strains for their ability to sporulate within biofilms and their resistance to cleaning procedure. High sporulation rates were often obtained within biofilms and spores were more resistant than vegetative cells to a cleaning-in-place procedure. We also demonstrated that *Bacillus* strains were able to meet complex biofilms and that sporulation was not affected by the presence of the other strains/species. From these results, biofilms seemed to be at least in part behind food contamination with spores.