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Fu S., Gao J., Liu Y., Chen H.:

Isolation of Cronobacter spp. isolates from infant formulas and their survival in the production process of infant formula

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Over a 24-month surveillance, three *Cronobacter* strains, NC041, NC830, an NC1006, were isolated from 77 powder infant formulas (3.90%). No *Cronobacter* was detected in liquid milk. The prevalence of Cronobacter in the prefinal product and packaged final product was 3.70% and 4.35%, respectively. The isolated *Cronobacter* strains were subjected to several lethal challenges including the pH, drying, disinfectant, an simulated infant formulas manufacturing process (SIFMP). The results indicated that they exhibited unusual resistance to the dry stress and disinfectant. In SIFMP *Cronobacter* isolates were inoculated int

three possible contamination entry points involving the stages prior to heating, drying, and filling, respectively. No Cronobacter could survive the heating. However, a high level (105 CFU/ml) of *Cronobacter* was detected in the sample after the inoculation at the drying point. Furthermore, the survival of *Cronobacter* was observed during the storage at 10 °