

Survival of *Lactobacillus delbrueckii* ssp. *bulgaricus* following spray-drying [1995]

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Survival of cell concentrates of *Lactobacillus delbrueckii* ssp. *delbrueckii* following spray-drying in skim milk with and without ascorbic acid and monosodium glutamate was evaluated during storage at different conditions of temperature and water activity. High temperature and high water activities were detrimental to survival of dried cells. The death rate was higher in the presence of ascorbic acid and monosodium glutamate during storage at 20 C; at 4 C. survival was higher in the presence of these agents. The developed sensitivity of survivors to chemical inhibitors with specific action was used to provide insight into the nature of cellular damage. After drying, cells showed sensitivity to NaCl, lysozyme, penicillin, and pyronin Y, indicating damage to the cell membrane, cell wall, and DNA, respectively

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