Abstract

In this work, a simplified method is used to estimate the growth of Staphylococcus aureus in a pasteurized meat product left for several hours at environmental temperatures (diurnal time) in warm climates of different cities in Argentina. Hourly temperature data for a warm January (the hottest month of the year) day, and literature data on the kinetics of S. aureus growth inoculated in a pasteurized meat product were used for calculations. As shown by results, if a cooked meat product is left exposed to environmental temperature at diurnal time, predictions made when using a constant temperature value (i.e. average daily) may not be accurate. Growth estimations in contaminated food left under ambient conditions during diurnal time, should consider the changing environmental temperature for correct results.

Keywords

Staphylococcus aureus, Temperature, Environment, Predictive microbiology, Cooked meat, Generation time.