

Growth and survival of acid-resistant and non-acid-resistant shiga-toxin-producing *Escherichia coli* strains during the manufacture and ripening of Camembert Cheese.

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Growth and survival of acid-resistant (AR) and non-acid-resistant (NAR) Shiga-toxin-producing *Escherichia coli* (STEC) strains were investigated during the manufacture and ripening of microfiltered milk Camembert cheeses. The induction of acid resistance of the STEC strains in cheeses was also studied. Six different mixtures of AR and/or NAR STEC strains were inoculated separately into microfiltered milk at a level of 10^3 CFU mL⁻¹. The STEC counts (AR and NAR) initially increased by 1 to 2 log(10) CFU g⁻¹ during cheese-making. Thereafter, the populations stabilized during salting/drying and then decreased during the early stages of ripening. Exposing the STEC strains in artificially inoculated cheeses to simulated gastric fluid (SGF - pH: 2.0) reduced the number of NAR strains to undetectable levels within 40 minutes, versus 120 minutes for the AR STEC strains. AR and NAR STEC were able to survive during the manufacture and ripening of Camembert cheese prepared from microfiltered milk with no evidence of induced acid tolerance in NAR STEC strains.