

## PORK SAFETY

**Title:** INTERVENTIONS TO CONTROL SALMONELLA I 4,[5],12:i:- IN PORK – NPB #18-049

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**Scientific Abstract:** A mixed culture of different isolates of *Salmonella* serovar I 4,[5], 12:i:- were compared to a mixed culture of reference *Salmonella* serovars. Two groups of *Salmonella* were compared for their resistance to commonly used pork carcass interventions, survival in ground pork and thermal resistance in ground pork. There were no observed differences between the response of the two different groups of *Salmonella* serovars within intervention type. In addition, non-pathogenic *Escherichia coli* surrogates were also evaluated, and there were no observed differences between the responses of the two different groups of *Salmonella* serovars and the non-pathogenic *E. coli* surrogates within intervention type. There were no observed differences in the recovery and survival of the two different groups of *Salmonella* serovars in ground pork which had been treated with interventions, ground and stored at 5°C for two weeks. Finally, there were no observed differences in heat resistance between the two different groups of *Salmonella* serovars in ground pork which had been treated with interventions, ground and stored at 5°C for two weeks. However, there were observed differences in heat resistance in both groups of *Salmonella* serovars associated with refrigerated storage. The heat resistance of both of the two different groups of *Salmonella* serovars decreased after refrigerated storage. The results of these experiments demonstrate that there are no observed differences between the responses of *Salmonella* serovar I 4,[5], 12:i:- when compared to the reference *Salmonella* serovars .

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