

Detection of *Salmonella* in Chicken Meat and Chicken using Conventional and Rapid Culture Methods

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Abstract

A study on the detection of *Salmonella* in chicken meats and chickens using conventional and rapid culture methods was conducted over a four weeks period in Selangor area of Malaysia. Thirty chicken meats of various parts included wing, breast and thigh were sampled from three markets and 75 cloacal swabs were sampled from three farms located near UPM. Two isolation methods used in this study were conventional culture method and rapid culture method for both food and cloacal swab samples. Of the thirty chicken meats sampled, three (10%) were positive for *Salmonella*. The occurrence of *Salmonella* in chicken meat maybe due to contamination during handling, processing, supply, transportation and the processing areas. Of the 75 cloacal swabs sampled, four (5.3%) were positive for *Salmonella*. The occurrence of *Salmonella* in chicken may due to poor management and stress. From the two isolation methods used, rapid culture method isolated 10% of *Salmonella* in chicken meat and none from cloacal swabs. On the other hand, the conventional method isolated 5.3% of *Salmonella* from cloacal swabs and none from chicken meat. The presence of *Salmonella* in chickens and chicken meat is of public health importance.

Keywords: *Salmonella*, chicken meat, chicken, rapid culture method, conventional culture method