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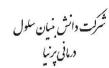












# Detection and Identification of *Salmonella Typhimurium* in Chicken Gizzard Using Conventional PCR

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### **Background and Aim**

Salmonella spp. especially *Salmonella typhimurium* is consider one of the most usual food infection agents. Also, Salmonelosis is known as one of the common disease between human and animal which is caused by this genus and is one of the most prevalent food-borne pathogens. The objective of this study, identification and detection of *Salmonella typhimurium* in chicken gizzard using conventional PCR.

#### **Materials and Methods**

For this purpose, 15 gizzard samples were collected from different parts of Mashhad. Then, 25 gr of each sample has been homogenized. DNA extraction was done from homogenized tissues using Animal Tissue DNA extraction Kit (Pars Toos, Iran). In the next step, PCR was done with primers specific for *SiiA* gene .In all cases of PCR, positive control and negative control were used for confirmation of experiments.

#### Results

Investigating PCR products by using electrophoresis have shown that a 107 bp fragment have been amplified successfully. Results showed that 11 out of 15 samples were contaminated with *Salmonella typhimurium*.

#### Conclusion

This study showed that due to the limitations and difficulties of other laboratory separation methods, PCR can be used as a sensitive and fast method for detecting the contamination of the samples by *Salmonella typhimurium*.

Key Words: Salmonella typhimurium, PCR, Chicken gizzard.