ABSTRACT

For the investigation of *Salmonella* in the poultry products samples of egg, neck, liver, intestine, tail and flesh were taken from different poultry shops in Gujranwala. Freshly prepared Selenite broth test tubes were inocubated with 3g of each sample.

Bismuth sulphite agar plates were used for further sub-cultures and incubated at 37 °C for 24 hours. Uniform black colonies were transferred to Brilliant green agar plates. Appearance of pink colonies was the positive *Salmonella* isolates. For further purification MacConkey agar was used.

For the identification of serotypes of *Salmonella* different types of antisera were used.

The following *Salmonella* serotypes were isolated from the poultry ptoducts; *Salmonella gallinarum, Salmonella pullorum, Salmonella indians, Salmonella typhimurium, Salmonella enteritidis, Salmonella paratyphi C, Salmonella serovar* and *Salmonella senftenberg*.

Out of 2400 samples *Salmonella* was present in 263 samples 10.96% contamination. Maximum contamination of *Salmonella* was found in the intestine i.e. 18.25%,b liver 11.50%, tail 14.75%, neck 9.50%, flesh 8.50%.

Minimum *Salmonella* contamination was present in the egg samples with 3.25%.

Salmonella caused food borne infections in man. Poultry had a role in the transmission of this pathogen to human.

Maximum contamination was 3.083 due to *Salmonella typhimurium*. Second contamination level was caused by *Salmonella enteritidis* with 2.79%, third level of contamination was 1.75% due to *Salmonella pullorum*, fourth level of contamination was 1.042% due to *Salmonella Indians*, *Salmonella gallinarum* caused 0.75% contamination which was the fifth level of contamination. *Salmonella paratyphi C* and *Salmonella senftenberg* caused sixth and seventh level of contamination i.e. 0.708% and 0.458% respectively. The minimum contamination was caused by *Salmonella serovar* which was 0.375%.

In retail shops the cutting board, knife, hands of the butcher and weighing balance tray are the principal surfaces due to which chicken meat becomes contaminated. Remnants of food particles on these surfaces might enhance the growth of *Salmonella*, these are perhaps the sources of cross-contamination of *Salmonella* in poultry and poultry products.

Luckely we have adopted such a cooking method in our homes and restaurants that kill majority of the bacteria which prevents us from disaster.