

THE SAFETY AND QUALITY OF FROZEN POULTRY AT AL- HASSA SUPERMARKETS.

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ABSTRACT

Frozen chickens (360 samples) of economical importance were collected from Al-Hassa supermarkets, represented to twelve companies; 7 of them locally produced frozen chickens and the others were imported companies. To evaluate the hygiene and safety quality of frozen chickens. Total psychrotrophic aerobic bacteria, *Enterobacteriaceae*, *Salmonella* Spp and serotypes, *Staphylococcus aureus* and pH were determined. Results revealed that the mean values of total psychrotrophic aerobic bacteria on locally produced and imported frozen chickens were 3.92 and 2.80 log₁₀ CFU/cm², respectively. The numbers of *Enterobacteriaceae* and *Staphylococcus aureus* on the imported frozen chickens were significantly lower than that of the locally produced one. The pH values of frozen chickens breast ranged from 5.79 for imported to 5.90 for locally produced, the differences were significant. A total of 360 frozen chickens were analyzed and revealed the presence of *Salmonella* Spp. in 20% (72/360). Eight different serotypes isolated; *S. typhimurium* was predominant 27.78%, followed by *S. hadar* 26.39%; *S. enteritidis* 16.66%, *S. virchow* 15.28%; *S. heidelberg* 5.55%; *S. infantis* 4.17%; *S. cerro* 2.78% and *S. anatum* 1.39%. The hygiene quality of imported frozen chickens was significantly higher than that of the locally produced one. The authors stress on the importance of good hygiene practice and risk analysis at the broiler processing plants.