

Microbial Quality of Beef and Mutton in Bauchi Metropolis

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Abstract : The microbial quality of beef and mutton sold in four major markets of Bauchi metropolis was assessed in order to assist in ascertaining safety. Shops were selected from 'Muda Lawal', 'Yelwa', 'Wunti', and 'Gwallameji' markets. The total bacterial count was used as index of quality. A total of thirty two (32) samples were collected in two successive visits. The samples were packed and labelled in a sterile polythene bags for transportation to the laboratory. Microbial analysis was carried out immediately upon arrival under a septic condition, where aerobic plate was used in determining the microbial load. Result showed that beef and mutton from Gwallameji had the highest bacterial count of 9.065×10^5 cfu/ml and 8.325×10^5 cfu/ml for beef and mutton respectively followed by Wunti market (6.95×10^5 beef and 4.838×10^5 mutton) and Muda Lawal (4.86×10^5 cfu/ml beef and 5.998×10^5 cfu/ml mutton). Yelwa had 5.175×10^5 and 5.30×10^5 for beef and mutton respectively. Bacterial species isolated from the samples were Escherichia coli, Salmonella spp, Streptococcus species and Staphylococcus species. However, results obtained from all markets showed that there was no significant differences between beef and mutton in terms of microbial quality.

Keywords : beef, mutton, salmonella, sterile

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