

Prevalence of Foodborne Bacteria in Minced Meat and Baladi Sausage in Zagazig, Egypt

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The present work is carried out to assess the hygienic status of minced meat and Baladi sausage in local shops in Zagazig city. A total of 50 samples (25 of each) were collected and hygienically transported to the laboratory within 30 min for microbiological examination. Samples of minced meat and Baladi sausage showed high aerobic plate count (APC) with a mean value of 8.47 ± 7.67 and 8.33 ± 7.32 log CFU/g, respectively. While the results of total psychrotrophic count, Enterobacteriaceae, MPN Coliforms and *S. aureus* were 8.22 ± 7.57 , 5.36 ± 4.5 , 5.80 ± 5.17 and 4.72 ± 4.34 log CFU/g in minced meat samples, respectively, while in Baladi sausage samples were 8.5 ± 7.96 , 5.44 ± 4.65 , 6.28 ± 5.68 and 4.94 ± 4.38 log CFU/g, respectively. The data revealed the presence of *E. coli* with an incidence of 80% in minced meat samples and 44% in Baladi sausage samples where serologically identified and recorded as O₁₁₁:H₂ (EHEC), O₂₀:H₇ (EPEC), O₁₁₄:H₄ (EPEC), O₂₆:H₁₁ (EHEC), O₁₂₇:H₆ (ETEC), O₉₁:H₂₁ (EHEC), O₁₂₆:H₂₁ (ETEC), O₁₂₄ (EIEC), O₁₁₉:H₆ (EPEC), O₅₅:H₇ (EPEC) and O₁₂₁:H₂ (EPEC). Coagulase positive *S. aureus* was detected with an incidence of 48% in minced meat samples and 28% in Baladi sausage samples.

Key words: sausage, minced meat, aerobic plate count, psychrotrophic count, *E. coli*