

Probiotics' Antibacterial Activity on Beef and Camel Minced Meat at Altered Ranges of Temperature

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Abstract : Because of their inhibitory effects, selected probiotic Lactobacilli may be used as antimicrobial against some hazardous microorganisms responsible for spoilage of fresh minced beef (cattle) minced meat and camel minced meat. Lactic acid bacteria were isolated from camel meat. These included 10 isolates; 1 *Lactobacillus fermenti*, 4 *Lactobacillus plantarum*, 4 *Lactobacillus pulgaricus*, 3 *Lactobacillus acidophilus* and 1 *Lactobacillus brevis*. The most efficient inhibitory organism was *Lactobacillus plantarum* which can be used as a propiotic with antibacterial activity. All microbiological analyses were made at the time 0, first day and the second day at altered ranges of temperature [4±2 °C (chilling temperature), 25±2 °C, and 38±2 °C]. Results showed a significant decrease of pH 6.2 to 5.1 within variant types of meat, in addition to reduction of Total Bacterial Count, Enterococci, *Bacillus cereus* and *Escherichia coli* together with the stability of Coliforms and absence of *Staphylococcus aureus*.

Keywords : antibacterial, camel meat, inhibition, probiotics

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