A Survey of Microbiological Quality of Fast Foods in Colombo area

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ABSTRACT

Fast-foods have become very popular among urban communities of Sri Lanka due to their busy life style. Most types of fast-foods are not thoroughly cooked as the traditional preparations and this can lead to spread of food borne diseases. The microbial quality of fast-food has not been previously studied in Sri Lanka.

The objective of the present study was to assess the microbiological quality of fast-food items containing meats and compare with the Sri Lanka standards for such items.

The total of 63 ready to eat food samples from fast food outlets in Colombo city and suburbs were examined over one year for the presence of indicators of enteric pathogens Salmonella, S. aureus and E.coli 0157:H7. Standard methods specified by the Sri Lanka standards were used in detecting indicators of enteric pathogens, Salmonella and pathogenic Staphylococci.

Sorbitol MacConkey agar was used as the selective medium for isolation of E.coli 0157:H7. The isolates were subjected to biochemical tests and the suspicious colonies were confirmed by latex agglutination test.

Total of twenty seven beef samples were tested and out of this, 06 samples (18.7%) were positive for S. aureus and 07 samples (18.7%) were positive for Salmonella, two samples (7.2%) were positive for E.coli 0157:H7 based on the results of latex agglutination test. Out of twenty five chicken samples, 05 were (20%) positive for S. aureus and 09 samples (36%) were positive for Salmonella. Among eleven pork samples, 04 (37.4%) were positive for S. aureus and 03 samples (27.3%) were positive for Salmonella.

In conclusion it can be said that the microbiological quality of fast foods in Colombo area is poor.