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Assessment of microbial quality of street foods sold in Wijerama junction area, Nugegoda, Sri Lanka

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Background: Microbial contamination in food is a growing food safety problem globally where street food remains one of the most concerning food categories. Lack of knowledge on good manufacturing and personal hygiene practices in street vendors can cause microbial contaminations in street foods.

Objective: The main objective of this study was to determine the microbial quality of some selected street foods sold in Wijerama junction area, Gangodawila, Nugegoda.

Method: Five types of most commonly consumed Ready-To-Eat (RTE) street foods (3 samples representing each food category; fruit salad, fruit juice, wade, string hopper, and dosai) were analyzed (n=15) for Total Plate Count (TPC), Total Yeast And Mold Count (TYMC), Total Coliform Count (TCC), presence of fecal coliform and *E.coli* using standard microbiological methods.

Results: TPC and TYMC values of the tested street food samples were in between 3.4–6.3 log CFU/ml and 3.8–6.3 log CFU/ml respectively. The highest TPC and TYMC values were observed in fruit salad and dosai samples respectively. Five (33.3%) food samples exceeded the permissible limit (10 MPN/g) of TCC. Eleven (73.3%) and 8 (53.3%) food samples were positive for fecal coliform and *E. coli* respectively.

Conclusion: Street foods sold in Wijerama junction area, Gagodawilla, Nugegoda can possess a serious health risk to the consumers. It can be suggested that food safety and hygiene practices followed by street food vendors need improvements, and enforcing strict regulations on good manufacturing and hygienic practices among street food vendors is important.