

## ISOLATION AND IDENTIFICATION OF POTENTIAL HIGH RISK PATHOGENS FROM BLENDERS USED IN GRINDING SOME FOOD STUFFS IN A LOCAL COMMUNITY MARKET IN RIVERS STATE: A PUBLIC HEALTH CONCERN

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Blenders used in cutting and grinding food substances are often times not cleaned up after use. This leads to the proliferation of microorganisms, as these food substances contain nutrients that encourage microbial growth. Samples were obtained randomly in the market by scrapping blenders that had been used to blend Okazi (*Gnetum africanum*), Ogbono (*Iringia gabonensis*), Egusi (*Citrullus lanatus*) and Crayfish (*Procambrous clarkia*) in a major local market in Elele Community in Ikwerre Local Government Area of Rivers State. The samples collected were subjected to standard bacteriological analysis for the isolation and identification of pathogens in food substances. It is strongly believed that these food substances are highly nutritious and as such, can permit the growth of different microorganisms, thus providing environments conducive enough for their growth and replication in a fast and sporadic manner. However, results from this study shows that samples from the blender used in blending Ogbono had the highest bacterial colony forming units ( $1.67 \times 10^6$ ) and the least bacterial colony forming units was from that of the crayfish ( $2.72 \times 10^4$ ). However, out of the ten bacterial isolates identified, *Staphylococcus aureus* had the highest frequency of 24% while *Xanthomonas spp* and *Pseudomonas spp* had the least frequency of 4% each respectively. The presence of these pathogenic bacteria poses a huge threat of toxins(s) production and associated diseases, and thus should provoke a massive public health concern among stakeholders. Nonetheless, cleaning of blenders before and after use should therefore be encouraged among the market local food stuff traders, even as the importance of health education and awareness on personal hygiene and food safety should be strongly underpinned in our local communities, so as to reduce the increasing trend of possible outbreak of gastro-enteritis epidemic outcome of unimaginable proportion among the weak and most vulnerable subjects in the hinter lands.