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Comparison of bacterial contamination profiles of freshly baked bread (from bakeries) and vended bread in the Ojoo area of Ibadan, Oyo State, Nigeria**Oluwadara Oluwaseun Alegbeleye**

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Unsanitary handling, transport and storage of ready-to-eat foods can lead to microbial adulteration, which can impair the quality of food have deleterious effects on human health and result in severe public health crises. Bacterial counts in ready-to-eat foods are key factors in assessing the microbiological quality and safety of food. This comparative study evaluated and compared bacterial contamination levels of bakery and vended bread samples in the Ojoo Area of Ibadan, Oyo State, Nigeria. A total of 336 bread samples were obtained from two bakeries and ten vendors in the study area over a seven month period. Personal and environmental hygiene levels of bakery workers and vendors as well as bread handling, transport, storage and vending practices were assessed through personal observations and informal interviews. The microbiological status of the bread loaves was evaluated using standard microbiological methods (morphological, phenotypic and molecular characterization). The vended bread samples were found to be several magnitudes more contaminated than the bakery samples. The bacterial isolates obtained during the study were identified as *Bacillus megaterium* (4.30%), *Staphylococcus arlettae* (0.005%), *Staphylococcus saprophyticus* (2.78%), *Citrobacter freundii* (2.40%), *Bacillus flexus* (1.64%), *Bacillus species* (49.59%), *Pseudomonas aeruginosa* (4.12%), *Pseudomonas fluorescens* (0.92%), *Pseudomonas species* (0.045%), *Escherichia coli* (30.44%), *Klebsiella* sp. (0.040%) and *Aeromonas hydrophila* (3.72%). The findings demonstrated that the bread samples become contaminated after handling and constitute a potential hazard to human health in the area. More stringent adherence to food safety regulations should be encouraged and enforced by the appropriate authorities.

Biography

Oluwadara Oluwaseun Alegbeleye studied Microbiology at University of Agriculture, Abeokuta, Nigeria and completed her Masters at Cape Peninsula University of Technology, Cape Town, South Africa. She is currently working on her PhD and has several published articles in national newspapers and peer reviewed journals.

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