MICROBIAL QUALITY ASSESSMENT OF FURA DA NONO SOLD IN GIDAN KWANO CAMPUS, BOSSO CAMPUS AND OFF CAMPUSES

[*1]Jiya, M.J., [1]Maxwell, M.Y.O. [1]Zubair, A.B and [1]Femi, F.A
[*1]Department of Food Science and Technology, Federal University of Technology Minna, Niger State, Nigeria.
[*]Corresponding author E-mail:jumaryjiya@gmail.com
07037471443

ABSTRACT

The Fura da nono is a millet cereal and fermented milk which is highly a nutritious beverage consumed often in northern part of Nigeria. This research was aimed at ascertaining the overall safety of locally prepared fura da nono sold in Gidan kwano campus, Bosso campus and off campuses of FUTMINNA, Niger state, Nigeria, by analyzing their microbial qualities. Four (4) samples of Fura da nono were obtained from local hawkers in sterile bottles, and was taken immediately to the laboratory on the same day to determine their microbial quality assessment. Microbiological analysis was done using pour plate techniques after six-fold serial dilution. Microbes were isolated via culturing and biochemical tests were confirmed. Six bacteria including: *Escherichia coli, Klebsiella spp, Staphylococcus aureus, Salmonella, Bacillus subtilis, Pseudomonas aeruginosa* and seven fungi including: *Saccharomyces cerevisiae, Saccharomyces boulardii, Debaryomyces castellii, Candida albicans, Saccharomyces kluyverii, Candida torulopsis* and *Saccharomyces delbruekii* were isolated. The total viable bacterial count of all the samples analyzed ranges from 5 $x10^6$ to 23x 10^6 (cfu/ml) and the fungi count of all the samples also ranges from 176 $x10^4$ to 272x 10^4 (cfu/ml) respectively. From the result obtained in these analyses the sample collected from Bosso off campus has the highest bacterial count of 23x 10^6 (cfu/ml) while the sample collected from Bosso campus has the least count. The poor handling of Fura da nono during processing and marketing exposes it to microbial contamination hence, it could be of negative impact to human health therefore it is recommended that it should be prepared in a hygienic non open-air environment. The attention should be given to their microbial safety of the product to eliminate health hazards posed on the consumers by the microorganism isolated.

Keywords: Fura da nono product, Bacteria count, Fungi count and Microbial quality.