

**MICROBIOLOGICAL EVALUATION OF KUNUN ZAKI SOLD IN FEDERAL
UNIVERSITY OF TECHNOLOGY, MINNA CAMPUS**

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ABSTRACT

The study determined the microbiology evaluation of Kunun zaki beverages which is a non-alcoholic and indigenous drinks processed and consumed within the Federal University of Technology, Minna Campus and Nigeria as a whole. Kunun zaki is a traditional cereal based non-alcoholic fermented beverage that is mostly consumed in the Northern part of Nigeria. Six (6) samples of kunun zaki were purchased and analyzed from different points within the university campus. Bacteria and Yeast were enumerated and identified, Serial dilutions were carried out on the collected samples and a dilution factor of 10^3 was used for each sample. The bacterial count and Yeast count were determined using serial dilution method. The result obtained showed high bacteria count which ranges between 5.10×10^3 cfu/ml to 1.60×10^3 cfu/ml and Yeast count ranges between 15.60×10^3 cfu/ml to 1.40×10^3 cfu/ml. A total of five bacterial and two fungi isolates identified include bacteria with percentage of occurrence: *Bacillus subtilis* (14.29%), *Bacillus cereus* (50%), *Streptococcus sp.* (7.14%), *Klebsiella sp.* (7.14%) and *Bacillus megaterium* (21.43%). while fungi: *Aspergillus niger* (50%) and *Saccharomyces cerevisiae* (50%). This means that the consumption of these products could pose public health challenge. Except when standard method is fully utilized for processing this product to reduce contamination and spoilage and then present satisfactory product to its consumers and even made it possible for the product exportation.

Keywords: Kunun zaki beverages, Bacterial count, Fungi count and Spoilage