PROXIMATE COMPOSITION AND MICROBIOLOGICAL QUALITY OF FURA SOLD IN GIDAN KWANO CAMPUS, BOSSO CAMPUS, GIDAN KWANO OFF-CAMPUS AND BOSSO OFF-CAMPUS OF FEDERAL UNIVERSITY OF TECHNOLOGY MINNA NIGER STATE.

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ABSTRACT

Fura is an indigenous food made from millet a cereal crop, this work determined the proximate composition and microbiological quality of fura from four different location at federal university of technology campus and off-campus. The result of the study shows that fura is a good source of crude protein, fat, crude fiber, Ash, carbohydrate and moisture content. The percentage of the proximate parameters varies among the four samples as a result of different steps in production, type of soil in which the millet is grown, the blending process, storage and packaging. The microbiological quality was also evaluated and bacterial found are as follows Staphylococcus aureus, Escherichia coli, Pseudomonas earuginosa, Klebsiella spp, Proteus spp, Bacillus subtilis, and Lactobacillus spp while fungal identified are Saccharomyces spp, Candida spp, Aspergillus niger and Debaryomyces castellii. The microorganisms isolated from the fura was characterized and identify into species level and the disease they can cause when present in food consumed and way they can be prevented. Fur sample from GKO has the highest bacterial load of 2.04×10^5 while sample from GK has the lowest bacterial load of 9.8×10^4 and GKO sample with the highest fugal load of 1.04×10^5 while GK sample has the lowest fugal load of 4.2×10^4 which is above the standard for microbiological limit and standard for cereals and cereals grains food products for fungal cfu/g 10² and Bacteria cfu/g 10⁴. The result showed that the fura was contaminated due to lack of hygiene which result to diarrhea, vomiting, scaley skin and urinary tract infection .The evaluation of the fura samples help to indicate possible way to upgrade the processing of fura production to a level safe for consumption which involves practicing good personal hygiene, using clean source of water that is good for drinking, fura should be well packaged to avoid constant contact with hands.

Keywords: Fura da Nono, Proximate analysis and Microbial quality