



FIRST REPORT OF NUTRITIONAL VALUE AND CONSUMER ACCEPTABILITY OF 'KATI' PRODUCED FROM SORGHUM USING LACTIC ACID BACTERIA AS STARTER CULTURES

Emmanuel Olabanji Afolabi¹, Clement Olusola Ogidi²✉ and Bamidele Juliet Akinyele¹

¹ Department of Microbiology, The Federal University of Technology, PMB 704, Akure, Nigeria

² Biotechnology Unit, Department of Biological Sciences, Kings University, PMB 555, Odeomu, Nigeria

✉ clementogidi@yahoo.com

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ABSTRACT

Most fermented cereal-based foods are source of nutrients and energy for human being. Hence, a large number of fermented cereal products are consumed daily in Africa. 'Kati', an indigenous food to Akoko in Ondo State, Nigeria was produced using different Lactic acid bacteria (LAB) as starter cultures. Nutrient contents and sensory evaluation of 'Kati' produced with different LAB as starter culture were assessed. *Saccharomyces cerevisiae* have the highest occurrence (20.8%) during the steeping of sorghum. *Lactobacillus plantarum* was most predominant bacterium in the fermented slurry with the value of 19.5%. 'Kati' produced with *Lactobacillus* spp. have moisture (64.0 to 67.23%), ash (0.39 to 0.47%), crude fibre (1.05 to 2.31%), protein (2.02 to 5.15%) and carbohydrates (24.12 to 27.35%) contents. The fermented food has minimal value of phytates (0.64-0.77 mg/100g), phenols (11.47-14.75 mg/100g), tannins (0.40-0.51 mg/100g), and oxalates (0.11-0.18 mg/100g). 'Kati' produced with each *Lactobacillus* spp. were preferred to panellists in terms of general acceptability. LAB generally regarded as safe (GRAS), can be used as starter culture to improve nutritional contents and organoleptic property of traditional foods in order to gain wide acceptance by consumers.
