

### Safety of Two Sudanese Street Foods of Plant Protein Origin

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**Abstract:** The main objective of this research was to study the safety aspects of two Sudanese street foods, namely: Tamia (Falafil) and Dakwa (peanut butter) collected from different sources in Khartoum State. Samples for Tamia were obtained from Albait Alssory-Khartoum North, College of Agricultural Studies-Sudan University of Science and Technology and Omdurman market. Samples for Dakwa were obtained from Shambat Central Market and crusher machine. Microbial and chemical characteristics were evaluated. The total bacterial count (TBC) (cfu/g) in Tamia was  $5.6 \times 10^3$ ,  $3.9 \times 10^4$  and  $4.9 \times 10^5$  in samples of Albait Alssory, College and Omdurman market, respectively. Coliforms and moulds and yeasts in Tamia were not detected in Albait Alssory and College, while Omdurman market samples recorded  $1.7 \times 10^3$  for coliforms and  $5.8 \times 10^2$  for moulds and yeast. Pathogenic bacteria (*E. coli*, *Staph. aureus* and *Salmonella*) were not detected in all samples except *Staph. aureus* were detected in Omdurman market ( $3.9 \times 10^2$ ). TBC in Dakwa were  $5.4 \times 10^3$ ,  $5.6 \times 10^4$  and  $6.4 \times 10^4$  in crusher machine, Shambat market and Omdurman market, respectively. Coliforms were detected in all sources of Dakwa, while moulds and yeasts were detected only in Omdurman market. Albait Alssory was the only source of Dakwa free of pathogenic bacteria. Lead (Pb) in Tamia was 3.04 (ppb) in Albait Alssory and was not detected in the other two sources (College or Omdurman market). Aluminium (Al) and peroxide values were found in all sources of Tamia. Pb in Dakwa was 3.20 in Shambat market and was not detected in crusher machine and Omdurman market. Al in Dakwa was present in all sources while peroxide value was absent in the crusher machine.

**Key words:** Street foods • Dakwa • Tamia • Sudanese • Safety

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