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Storage stability of a Nigerian traditional extruded and deep fried corn-based snack (*Kokoro*)

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Kokoro is a rod-like, crunchy, and predominantly deep-fried corn-based food snack commonly consumed in south-western Nigeria. Increasing demand, complexity and labour intensive process underscores the need for improved processing. The effect of different moulding methods and packaging on the storage of *kokoro* was investigated. Traditionally processed *kokoro* served as control. Results showed that, moulding methods have no significant effect on the nutritional composition of the *kokoro*. Twin-screw extruded *kokoro* stored in vacuum packed high density polyethylene (HDPE) had better sensory (color, flavour, texture and taste) and higher keeping qualities (low total plate count and peroxide value) than *kokoro* from other moulding methods and reference sample. The storage stability studies showed that, bacterial loads for hand rolled and market samples were significantly ($p<0.05$) higher than those of twin-screw extruded *kokoro*. Manually extruded *kokoro* stored in low density polyethylene (LDPE) had highest total plate counts. Twin-screw extruded *kokoro* samples stored in HDPE had the least total plate counts. This work showed that, twin-screw extrusion and HDPE could serve as improved moulding method and packaging material for *kokoro*.

Biography

Aiyeleye F B has obtained a Bachelor of Science degree in Biochemistry from the University of Lagos, and completed his PhD at the Federal University of Agriculture, Abeokuta, Nigeria. He has over 30 years of teaching experience in Food Processing and Preservation. He has authored and co-authored books and publications in peer-reviewed journals. He has served as Head of Department and Dean of the Faculty, at different times in his career. He also provides consultancy services to various food processing industries.

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