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Prof. Lokuruka is an Associate Professor of Food Science in the Department of Food Science, Nutrition and Technology. He holds a Ph.D. Food Science (Cornell University, USA), a M.Sc. Food Science (University of Reading, UK), a postgraduate Diploma in Fishing and Fish Processing Technology (University of Trondheim, Norway), a Postgraduate Certificate in Food Technology (Hebrew University of Jerusalem, Israel) and a B.Sc. Food Science and Technology (University of Nairobi, Kenya). He worked in the Food Industry for over 10 years with 2 of those in the Canadian Food Industry. He has taught and done research cumulatively at Egerton, Reading, Cornell and Karatina Universities for over 31 years. His areas of research interest include: Food/Fish Quality Assurance and Toxicology; Food Quality Systems; Food Culture and Nutrition; Food Safety; Food and Nutrition Security; Food Law and Standards; Postharvest Systems Management and Food Industry Management. He has published 43 peer-reviewed academic works including 2 books and 2 book chapters in Food Science. He is a past Commissioner at the Public Service Commission of Kenya, a Board Member at the Kenya Industrial Research and Development Institute (KIRDI) and the Kenya School of Government among others. He is a current Academic Editor for the European Journal of Food Safety and Nutrition, the Founding Editor and Editor-in-Chief of the Journal of Food and Nutritional Sciences Research, a dedicated Technical Reviewer for the African Journal of Food, Agriculture, Nutrition and Development (AJFAND) since 2009 and an Editorial Board Member of AJFAND since 2015. Prof. Lokuruka is a Professional Member, Trustee and a former Honorary Secretary of the Kenya Institute of Food Science and Technology (KIFST) and a current Associate Member of the Kenya Nutritionists and Dieticians Institute (KNDI).

Ongoing Projects

1. The Contribution of Gender and Income to Food and Nutrition Insecurity among Students of Karatina University
2. Affordability as the Major Factor Influencing Food and Nutrition Security for Karatina University Students
3. Assessment of the Microbiological Safety of Street-vended Foods in a University town (Gitunduti), Mathira East sub-County, Nyeri County

PUBLICATIONS

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PEER-REVIEWED PUBLICATIONS

Lokuruka, MNI. (in press, 2021). COVID-19: A Review of What You Should Know and Do to

Keep Safe. Special Issue, African J. of Food, Agriculture, Nutrition and Development (AJFAND).

Lokuruka, MNI. An Overview of the Food and Nutrition Security Situation of Kenya. Journal

of Food and Nutritional Sciences Research **2020; 2(1)**, 112-119. Found at: <https://doi.org/10.3715/1000>.

Sewe, DS. and **Lokuruka, MNI.** Coping Strategies to Food Insecurity Employed By Students

of Karatina University, Kenya. Journal of Food and Nutritional Sciences Research **2020;**

2(1), 100-111. Found at: <https://doi.org/10.37512/900>.

Njoroge, JG. and **Lokuruka, MNI.** Sensory Acceptability of Cookies Fortified with Tilapia Fish

Bone Powder. Journal of Food and Nutritional Sciences Research **2020; 2(1)**, 92-99.

Found at: <https://doi.org/10.37512/800>.

Lokuruka, MNI. Food and Nutrition Security in East Africa (Kenya, Uganda and Tanzania-status, challenges and prospects), Chapter 6 in: Barakat Mahmoud (Editor):

"*Food Security in Africa*", ISBN-978-1-78985-734-4; IntechOpen Publishers, London,

2020. <https://doi.org/10.5772/intech.95036>.

Lokuruka, MNI. Food and Nutrition Security in East Africa (Rwanda, Burundi and South

Sudan-status, challenges and prospects), Chapter 7 in: Barakat Mahmoud (Editor)-

"*Food Security in Africa*", ISBN-978-1-78985-734-4; IntechOpen Publishers, London,

2020. <https://doi.org/10.5772/intech.95037>.

Muteti, M.K., **Lokuruka, MNI** and Yasindi, A. (**2020**). Nutrient Content of On-Farm Formulated Nile Tilapia (*Oreochromis Niloticus*) feeds:

Implications for the Aquaculture Industry in Kenya. Afr. J. Food Agric. Nutr. Dev. **20(4)**:

16127-16143. Found at: <https://doi.org/10.18697/ajfand.92.18085>.

Muteti, M.K. **Lokuruka, MNI** and Andrew W. Yasindi (**2019**). Socio-economic factors influencing Nile Tilapia aquaculture in Kenya. J. Food and Nutritional Sciences Research September 2019, **1(1)**, 41-50.

Lokuruka, MNI. (2019). Conjugated Linoleic Acid and Cancer in Humans, Is there a role or not? A Review of the Scientific Evidence; J. Food and

- Nutritional Sciences Research September 2019, 1(1), 26-40.
- Hodbod J, Stevenson EGJ, Akall G, Akuja T, Angelei I, Avery S, Buffavand L, Derbyshire S, Elias AB, Eulenberger I, Gownaris N, Kamski B, Kurewa A, **Lokuruka MNI**, Mercy F, Okenwa D, Rodgers C, Tebbs E (2019). Social-Ecological Change in the Turkana Basin: A Synthesis of Current Developments. *Ambio Journal* (Springer Publications), Vol 48, issue 1, p 1-17. First published online 08 Jan 2019. Found at: <https://doi.org/10.1007/s13280-018-1139-3>.
- Lokuruka, MNI. (2018).** Fish and Chips-considering convenience and affordability, but with what harm and cost to your health? A guest editorial, *African J. of Food, Agriculture, Nutrition and Development*; Vol 18, Issue 2, 14 p.
- Lokuruka, MNI. (2016).** Overview of Dairy Processing and Marketing in East African Dairy Value Chains: Opportunities and Challenges. *African Journal of Food Science* 10(11): 254-262; Nov 2016; <https://doi.org/10.587/AJFS2016.1465>.
- Lokuruka, MNI. (2016).** A Preliminary Survey of Animal Handling and Cultural Slaughter Practices among Kenyan Communities: Potential influence on meat quality. *AJFAND* Volume 16(1): 10670-10685. <https://doi.org/10.18697/ajfand.73.15255>.
- Lokuruka, MNI. (2016).** Food Quality Perspectives in African Fish Products-Practices, Challenges and Prospects. *Int. Journal of Fisheries and Aquatic Sciences*, May 2016, 6(1): 15-32.
- Lokuruka, MNI. (2015).** Microbiological and Biochemical Indices for a Kenya Fresh Fish Standard. *Egerton Journal of Science and Technology* 15: 11-29.
- Lokuruka, MNI and Lokuruka, PA. (2014).** The curse of AK 47-socioeconomic effects of Livestock rustling in the Turkana-West Pokot and Turkana-East Baringo axes. *Egerton Journal of Humanities, Social Science and Education* Volume X1 pg 117-141.
- Lokuruka, MNI and Birgen, V. (2014).** Growing Kenya's Public Service: Lessons in transformative resilience. *African Journal of Public Administration and Management (AJPAM)* 12(2): 50-72.
- Lokuruka, MNI. (2013).** Role of Zinc in human health with reference to African elderly. A review. *AJFAND* 12(2): 6646-6664.
- Lokuruka, MNI., Muyela, B., Okeyo, G. and Anakalo, S. (2013).** Creating a grading scheme for fresh and ice-stored white snapper (*Lutjanidae* spp) and Rabbitfish (*Siganus sutor*) using quality indices. *Egerton J. of Science and Technology* 13: 72-94.
- Lokuruka, MNI. (2013).** A literature review of role of obesity in adult health with reference

- to Africa: a review. *AJFAND* **13**(1): 7088-7104.
- Gogo, LA., Anakalo, S., and **Lokuruka, MNI.** (2012). Capillary gas chromatographic analysis of chemical changes during fermentation of cabbage juice. *Int. J. of Research in Chemistry and Environment.* **2**: 139-143.
- Lokuruka, MNI.,** Muyela, B., Okeyo, GO. and Anakalo, S. (2012). Effect of gutting on sensory, some biochemical and microbiological properties of Nile perch (*Lates niloticus*) and Nile tilapia (*Oreochromis niloticus*) stored in ice. *Continental J. Fisheries and Aquatic Science* **6**(3): 1-13.
- Lokuruka, MNI.** (2012). Scombrotoxin formation in Kenya's fish products-a food safety concern. *Professional Journal* **4**(2): 20-23.
- Lokuruka, MNI.** (2011). The food legislative and standardization system of Kenya. Lap Lambert Academic Publishers, Saarbrucken, Germany, 256 pp.
- Okeyo, GO. and **Lokuruka, MNI.** (2010). Deterioration profile of iced Lake Victoria Nile perch (*Lates niloticus*) in relation to some biochemical and microbiological indices. *Egerton J. of Science and Technology* **10**: 31-57.
- Lokuruka, MNI.** (2010). Effects of processing on soybean nutrients and potential impact on consumer health: an overview. *AJFAND* **11**(4): 5000-5017.
- Lokuruka, MNI.** (2010). Role of animal meats in cardiovascular diseases with reference to Sub-saharan Africa: a review. *AJFAND* **10**(1): 1966-1982
- Gogo, LA., Anakalo, S., **Lokuruka, MNI** and Sang, W. (2010). Antimicrobial effect of juice extract from fermented cabbage juice on select food borne bacterial pathogens. *Journal of Applied Sciences Research* **6**(2): 1801-1813.
- Lokuruka, MNI.** (2009). Scombrotoxicosis in African fisheries-implications for international fish trade: an overview. *AJFAND* **9**(7): 1617-1634.
- Okeyo, GO., **Lokuruka, MNI.,** and Matofari, JO. (2009). Nutritional composition and shelf life of the Lake Victoria Nile perch (*Lates niloticus*) stored in ice. *AJFAND* **9**(3): 901-919.
- Lokuruka, MNI.** (2008). Fatty acids in the nut of the Turkana doum palm (*Hyphaene coriacea*). *AJFAND* **8**(2): 124-132.
- Lokuruka, MNI.** (2008). The failure of the Norwegian-supported fish factory in Turkana, Kenya: an ecological-historical perspective. *Egerton Journal of Science and Technology* Vol. 2&3: 147-165.
- Lokuruka, MNI.** (2007). Potential nutritional benefits of consuming lipids of the Turkana Doum Palm (*Hyphaene coriacea*) nut. *Egerton J. Science and Technology* **7**(1):120-134.

- Lokuruka, MNI. (2007).** Amino acids and some minerals in the nut of the Turkana doum palm (*Hyphaene coriacea*). *AJFAND* 7(2) :106-121.
- Lokuruka, MNI. (2007).** Role of fatty acids of milk and dairy products in cardiovascular disease: a review. *AJFAND* 7(1): 45-59.
- Lokuruka, MNI. (2007).** The dilemma of iron supplementation-link to degenerative diseases. A commentary. *AJFAND* 7.
- Lokuruka, MNI. (2006).** Meat is the meal and status is by meat-recognition of rank, wealth and respect through meat in Turkana culture. *Food and Foodways Journal* 14(3-4): 201-229.
- Lokuruka, MNI and Regenstein, JM. (2006).** Handling and storage of Atlantic mackerel (*Scomber scombrus*) on biogenic amine production. *J. Aquatic Food Product Technology* 15(4): 19-35.
- Lokuruka, MNI and Lokuruka, PA. (2006).** The ramifications of the Turkana Patrol of 1918: Narratives by NgTurkana. Mirzeler M. (editor) *Lake Rudolf (Turkana) as Colonial icon in East Africa. American J. of ethnohistory* (Winter 2006) 53(1): 121-141.
- Lokuruka, MNI and Regenstein, JM. (2005).** Icing practices impact on scombrototoxin formation in Atlantic mackerel. *J. Aquatic Food Product Technology* 14(4): 23-36. DOI 10.1300/J030v14n04_03.
- Lokuruka, MNI and Regenstein, JM. (2004).** Biogenic amines in iced and temperature-abused Tropical fish-a comparative study with temperate Atlantic mackerel. *Journal of Aquatic Food Product Technology* 13(1): 87-99. DOI 10.1300/J030v13n01_08.
- Lokuruka, MNI. (2002).** Quality and food safety assurance in the fish industry. Amu Press, Nakuru,
- Lokuruka, MNI. (1993).** Some observations on controlled fermentation of an indigenous beverage (Busaa). *KIFST Rev.* 4(2): 36-46.