

Title/Qualifications: BSc, Msc, PhD

Department/Unit/Section: Foods, Nutrition and Dietetics

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Position: Senior Lecturer and Head of Department Food, Nutrition and Dietetics

Area of Specialization: Food Science and technology, Human nutrition and health

Research Interests: Food systems and sustainable diets, Food security, food safety, complementary feeding and food fortification.

Publications

- 1 Abong, G., Wanjala, G., Njeru, N., Kilonzi, S., Kiio, J., Oloo, B., ... & Kavunja, D. (2025). Thirteen-year surveillance of aflatoxin contamination in nuts and nut products in Kenya (2012–2024). *Frontiers in Sustainable Food Systems*, 9, 1677074.
- 2 Odongo, N. O., Akingbemisilu, T. H., Jordan, I., Bodjrenou, S., Kiio, J., Teuber, R., & Termote, C. (2025). Rural– urban built food environment disparities in Kenya: Applying ‘vendor neighbourhood’ as a lens for built food environment characterisation. *Journal of Agriculture and Food Research*, 102434.
- 3 Neema Muinde, Judith Kimiywe & Juliana Kiio (2025). Paternal Role on Feeding and Childcare: Exploring Practices, Perceptions and Challenges in Makueni County; A Qualitative study. *Journal of Food and Nutrition Sciences*, 13, 6).
- 4 Beatrice K. Mutiga, Eunice W. Njogu & Juliana N. Kiio (2025). Demographic and socio-economic factors associated with stunting among children aged 0-23 months attending Sub-County Hospitals, Meru County, Kenya. *Int J Community Med Public Health*. 12(9):3849-3855
- 5 Bridget Nduta Mwaniki, Sophie Ochola & Juliana Kiio (2025). Investigating the Interplay Between Physical- and Social-Environmental Factors, Eating Habits and Nutrition Status among Nutrition Students at a Kenyan Middle-Level Institution - A Cross-Sectional Study. *International Journal of Health Sciences and Research*. Volume 15; Issue: 9
- 6 Bridget Nduta Mwaniki, Sophie Ochola & Juliana Kiio (2025). Gap Analysis: Nutrition Knowledge Assessment and Practical Application Evaluations among College Nutrition Students at a Middle-Level Institution, Kenya. *International Journal of Health Sciences and Research* 15 (9), 246 - 263
- 7 J Ateka, C Mwangi, F Obebo, J Kiio, J Muniu. Influence of knowledge and attitudes on consumption of Biofortified iron Beans: Evidence from Kenya. (2025). *VeriXiv* 2, 222
- 8 Obebo, F., Ateka, J., Muniu, J., Kiio, J., & Mwangi, C. (2025). Shaping Demand for Nutritious Crops: Insights on Consumer Willingness to Pay for Iron-Biofortified Beans in Kenya. *AERC*
- 9 Mugo, B. M., Kiio, J., & Munyaka, A. (2024). Effect of blanching time–temperature on potassium and vitamin retention/loss in kale and spinach. *Food Science & Nutrition*, 00, 1–9. <https://doi.org/10.1002/fsn3.4186>
- 10 Nyakundi, P. N., Kiio, J., Munyaka, A. W., Galgalo, D. A., & Lohner, S. (2024). Consumption Pattern of Tea is associated with Serum Ferritin Levels of Women of Childbearing Age in Nandi County, Kenya: A Cross-sectional Study. *Annals of nutrition & metabolism*.
- 11 Kiio, J., Nduati, R., Kuria, E., Ochola, S., & Okoth, J. (2023). Bio-accessibility of iron and zinc in selected complementary foods fortified with micronutrient powders in Kenya. *International Food Research Journal*, 30(2), 514-523.

- 12 Kiio, J., Ochola, S., Nduati, R., Kuria, E., Mathenge, S., & Okoth, J. (2022). Bioequivalence of micronutrient powders to Corn-soy Blend on serum zinc concentration of children (6-36 months) with Moderate Acute Malnutrition in Thika urban slums, Kenya: A cluster-randomized controlled trial. *PLoS one*, 17(9), e0274870. <https://doi.org/10.1371/journal.pone.0274870>
- 13 Nyakundi, P., Kiio, J., & Munyaka, A. (2022). Serum ferritin levels are associated with frequent consumption of iron- and ascorbate-rich foods among women of childbearing age in Nandi County, Kenya. *Journal of Nutritional Science*, 11, E6. doi:10.1017/jns.2022.5
- 14 Susan K. Kivaya, Juliana N. Kiio & Eunice W. Njogu. Training, Knowledge and Skills of Community Health Volunteers on Complementary Feeding of Children Aged 6-23 Months in Machakos, Kenya. *International Journal of Community Medicine and Public Health* 9 (7), 3082-3089. DOI: <https://dx.doi.org/10.18203/2394-6040.ijcmph20222004>
- 15 Mwanzia, M., Kiio, J., & Okoth, E. (2022). Formulation, Processing and Characterization of Fermented Probiotic Mango Juice Using Selected Starter Cultures. *European Journal of Agriculture and Food Sciences*, 4(1), 86-91. <https://doi.org/10.24018/ejfood.2022.4.1.437>
- 16 Patrick Nyamemba Nyakundi, Juliana Kiio & Ann Munyaka: Does Education Level, Household Income, Budget for Food and Birth Interval Predict the Iron Status of Women of Childbearing age in Nandi County, Kenya? *EC Nutrition* 15.10 (2020): 41-49.
- 17 Book Publication: Juliana Kiio and Christine Njuguna: Food Safety, from Farm to Fork, Emerging and Re-emerging Issues. Copyright © 2020 Cambridge Scholars Publishing.
- 18 Fidelis N. Kilonzo, Winnie M. K., Joyce W. K., Juliana K., Daniel K., Catherine M., and Scholastica M., (2020) Wastewater Reuse For Urban And Peri-Urban Agriculture: Why It's Not Happening Soon? *Journal of Engineering in Agriculture and the Environment (JEA)*, Volume 6. No 2 pg. 32-40
- 19 Ann munyaka and Juliana Kiio. Book of Abstracts. International Food Safety Conference; Kenyatta University, Nairobi, Kenya; 20th to 24th May, 2019
- 20 J. Kiio and B. De Meulenaer (2011). Immuno-chemical detection of peanut (*Arachis hypogaea* L.) proteins using chicken antibodies. *Food and Agricultural Immunology*, 1-10.

Book and Book Chapters

1. Kiio JN & Waweru GW (2025). Complementary feeding recipes for children aged 6-23 months in Makueni County: Based on locally available foods. Nairobi, Kenya. Copyright © HealthDiets4Africa, Kenyatta University, Kenya, 2025
2. Juliana Kiio & Christine Njuguna: Food Safety, from Farm to Fork, Emerging and Re-emerging Issues. Copyright © 2020 Cambridge Scholars Publishing.

Policy brief

1. Forah Obebo, Josiah Ateka, Joseph Muniu, Juliana Kiio & Christine Mwangi. Shaping Demand for Nutritious Crops: *Consumer Willingness to Pay for Iron-Biofortified Beans in Kenya. Policy Analysis for Sustainable & Healthy Foods in African Retail Markets. African Economic Research Consortium (AERC)*. November 2025. <https://publication.aercafricallibrary.org/handle/123456789/4020>
2. FAO. Kenyan Food Composition Tables (KFCT) policy brief 2018; *Improving decision making through food composition data, the Kenyan Food Composition Tables (KFCT): an essential tool for policy makers, health practitioners, researchers, industry and agricultural sector.*

E-learning modules

- i. Food Microbiology and Parasitology I: *An Interactive Online Module for Bachelor of Science in Food, Nutrition & Dietetics*. Dr. Juliana Kiio, July 2020
- ii. Food Microbiology and Parasitology II: *An Interactive Online Module for Bachelor of Science in Food, Nutrition & Dietetics*. Dr. Juliana Kiio, July 2020
- iii. Food Processing, Preservation and Storage: *An Interactive Online Module for Bachelor of Science in Food, Nutrition & Dietetics*. Dr. Juliana Kiio, July 2020

Scholarly presentations at Conferences/Workshops/Seminars

- 1 Juliana Kiio, S. Ochola, E. Kuria and R. Nduati. Micronutrient powders and conventional Fortification: A bioequivalence trial comparing their effectiveness in improving serum zinc levels and functional outcomes. IUNS ICN International Congress of Nutrition held at the Palais des Congrès in Paris from Sunday 24 August to Friday 29 August 2025. Poster presentation.
- 2 Ondiek Felix, Juliana Kiio, Eid Brima, Parvez Haris. Levels of Acrylamide in Foods Consumed by Mothers and Children aged 6-23 Months in Makueni and Nairobi Counties, Kenya. Regional Webinar To Commemorate World Food Safety Day (WFSO) 2025. Theme: World Food Safety Day Symposium for Next Gen Food Safety Practitioners. <https://doi.org/10.25502/zdfh-x948/d>
- 3 Donkor, E., Frei, M., Ndindeng, S.A., Van Der Straeten, D., Matthys, C., Fernie, A.R., de-Magistris, T., Teixeira, P., Ojukwu, C., Traore, P.S., Djouaka, R., Chacha, S., Hervé, M.K., Diby, P.Z., Danquah, I., Rodrigue, K., Jordan, I., Elia, K., Grenov, B., Kiio, J., Haris, P. I., and Gechev, T. (2023). Combating malnutrition in Africa through diversification of the food systems. Paper accepted for poster presentation at Tropentag, September 20-22, hybrid conference, Berlin, Germany. "Competing pathways for equitable food systems transformation: trade-offs and synergies"
- 4 Juliana Kiio. Baobab fruit pulp and Acacia gum: Functional food ingredients for the 21st Century. Workshop on Health promoting and Disease preventing properties of African food plants and insects from East Africa. The Panari Hotel, Nairobi, Kenya. 07 - 08 October 2019.
- 4 Kiio J. N., Kilonzo F., Kyalo D., Muui C. & Mathenge S. Potential For Wastewater Re-use In Urban and Peri-Urban Agriculture to Mitigate Household Food Insecurity in Nairobi, Kenya. International Food Safety Conference, 20th to 24th May, 2019, Kenyatta University Kenya.
- 5 Cherono S., Munyaka A.W. & Kiio J. N. Effect of Aflatoxin Exposure on Micronutrient Deficiencies and Growth Retardation among Young Children: A Review. International Food Safety Conference, 20th to 24th May, 2019, Kenyatta University Kenya.
- 6 Cherono S., Munyaka A.W. & Kiio J.N. Assessment of Dietary Aflatoxin Awareness and Exposure Levels and Vitamin A Status of Children (6-23) Months Attending Makueni County Referral Hospital. International Food Safety Conference, 20th to 24th May, 2019, Kenyatta University Kenya.
- 7 Kyalo D., Kilonzo F., & Kiio J. N., Who Cares? Consumer Attitudes and Purchase Decisions on Peri-urban Agricultural Commodities in the Absence of Information Asymmetry. International Food Safety Conference, 20th to 24th May, 2019, Kenyatta University Kenya.
- 8 Munyaka A., Kiio J. N., Gachoya J. & Ondiek F. Heavy Metal Contamination of Sugar and the Sugar Chain Products in Nairobi and the Environs, Kenya. International Food Safety Conference, 20th to 24th May, 2019, Kenyatta University Kenya.
- 9 Kiio Juliana & Bruno De Meulenaer. Is the detection of peanut proteins by ELISA method affected by processing treatments? International Food Safety Conference, 20th to 24th May, 2019, Kenyatta University Kenya.
- 10 Juliana Kiio, S. Ochola, E. Kuria and R. Nduati. Bioequivalence of Micronutrient Powders to Conventional Fortification on Serum Zinc Levels. IUNS 21st ICN International Congress of Nutrition at Buenos Aires, Argentina 15-20th October 2017 at the Sheraton Buenos Aires Hotel & Convention Centre.

- 11 Juliana Kiio, S. Ochola, E. Kuria and R. Nduati. Is Home Fortification Effective on Improving Serum Zinc Levels Among Moderately Malnourished Children – A Case of Thika Urban Slums, Kenya. National Food and Nutrition Symposium “Mainstreaming Nutrition Innovations for Sustainable development” November 23 – 24, 2016, Nairobi, Kenya (Oral Presentation).
- 12 J. Kiio, S. Ochola, E. Kuria, R. Nduati and J. Okoth. Micronutrient Powders: Does the Anti-Nutrient Content Affect the *In Vitro* Bio-accessibility of Iron and Zinc? Integrated Nutrition Conference, Catholic Relief Services (CRS), November 14-15, 2016, Nairobi, Kenya, (Oral Presentation).
- 13 Juliana Kiio, Sophie Ochola, Elizabeth Kuria and Ruth Nduati. Community Screening and Assessment of Dietary Intake for Food Supplementation among Malnourished Children Aged 6-36 Months in Thika Urban Slums, Kenya. 1st Global Conference on Patient -Centered Care at Kenyatta University; 29 September -2nd October 2015, Nairobi, Kenya (Oral Presentation).
- 14 Juliana Kiio, Sophie Ochola, Elizabeth Kuria and Ruth Nduati. Dietary Intake, Iron and Zinc Status of Moderately Malnourished Children Aged 6-36 Months in Thika Urban Slums, Kenya at the Federation of African Nutrition Societies (FANUS) 3rd Conference 25-29 May 2015, Arusha, Tanzania (Poster Presentation).
- 15 Juliana Kiio & Bruno De Meulenaer. Generation of chicken antibodies for the immunochemical detection of peanut (*Arachis hypogaea* L.) proteins. The National Council for Science (NCST)- 4th Annual Conference for Dissemination of Research Results and Exhibition of Innovations held between 3rd to 6th May, 2011.
- 16 Juliana Kiio. Kenya Institute of Food Science and Technology Students (KIFSTS 1996) Conference, Nairobi, Kenya. Meat preservation using natural plant extracts (*Tamarindus indica*).

National Appointments and Assignments

- Member of National Codex Committee (NCC-KE), representation of food safety experts from academia
- Member of Kenya Bureau of Standards (KEBS) Technical Committees:
 - o KEBS/TC 164 - Nutrition and Health
 - o KEBS/TC 018 - Food Hygiene
 - o KEBS/TC 022 - Food additives
- Secretary General, Kenya Association of Food Safety and Protection (KAFSAP): 2019 to 2024.
- Member of three National Technical Working Groups: Healthy Diets, Maternal Young Child Feeding, Food and Nutrition Linkages.
- Member (Scientific Committee) Local Organizing Committee; International Food Safety Conference, 20th to 24th May, 2019, Kenyatta University Kenya.
- Member of the committee reviewing the Kenyan Food Composition databases coordinated by FAO, KALRO and MOH; 2015-2018.
- Field supervisor in a National Large Country-Lot Quality Assurance Survey on Micronutrient Supplementation in Kenya by the Micronutrient Initiative (MI) and the Ministry of Health (MoH) from 10th to 22th January 2016.
- Field supervisor in a National Large Country-Lot Quality Assurance Survey on Micronutrient Supplementation in Kenya by the Micronutrient Initiative (MI) and the Ministry of Health (MoH) from 5th to 17th February 2014.

Professional Training

1. Kenya: Integrated phase classification of Acute Malnutrition Training (IPC AMN) Level 1 training conducted at Kenyatta University, 9th -13th September 2024 funded by UNICEF and FAO.
2. African Economic Research Consortium (AERC). Gender Mainstreaming and Market Modelling. October 2-6, 2023, in Johannesburg, South Africa.
3. WHO training on food environment policy actions on 12th to 16th June 2023, Sawela Lodge, Naivasha Kenya.
4. Strategies in neonatal care to promote optimized growth and development: Focus on low birth weight infants, Online course by Nestle Nutrition Institute, 2021
5. Health Education Partnership Initiative HEPI Manuscript Writing Workshop: 27th Oct, 29, to Nov 5, 2020 Virtual training
6. Participated in a three-day online training on FoodEx2 software use to harmonize food consumption datasets 26th through to 29th October 2020. FAO ROME
7. African Nutrition Leadership (ANLP) course in South Africa, 2017
8. Data Analysis using STATA in Kenyatta University, 2017
9. FAO/INFOODS training on Food composition databases 17 – 20 November 2015 - Nairobi Kenya.
10. Nutrition in emergencies module, Kenyatta University FAO/FSAU: training workshop may 3rd-6th 2011.
11. Training of millers and regulatory staff on quality assurance and quality control (QA/QC) in support of national flour fortification programmes and workshop on monitoring and surveillance for public health and nutrition managers organized by Flour Fortification Initiative(FFI)/smarter futures – 4-7 April 2011 Dar es salaam, Tanzania.
12. *Neglected and Underutilized Plant Species (NUS)*, Nairobi 24 - 28 November 2008 - Organized by Bioversity International and International Foundation for Science, Sweden.
13. The 20th anniversary symposium on "Research in Applied Nutrition: Challenges and Expectations" in Brussels 3rd December, 2004 organized by Nutrition Third World and the [Royal Academy of Overseas Sciences of Belgium](#).