

## CURRICULUM VITAE

**Name:** Juliana Nduku Kiio (PhD)  
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**Date of Birth:** 30.11.1974

**Career Aspiration:** Training, research work and consultancy in the areas of nutrition, food security, food safety and food technology for better nutritional and health outcomes and improved livelihoods both nationally and internationally.

### **Education Background**

2010-2016: **PhD (Food, Nutrition and Dietetics), Kenyatta University, Kenya.**

Research area: Bioequivalence of micronutrient powders to conventional fortification on zinc status of children aged 6-36 months in Thika Informal Settlements, Kenya.

2004 - 2005: **Complementary Studies in Food Science and Nutrition, Ghent University, Belgium\*\*Distinction\*.**

Modules: Human Nutrition, Food and Nutrition Interventions, Nutrition Planning, Monitoring and Evaluation, Nutrition Epidemiology, Nutrition Disorders and Rural Development.

2002 - 2004: **Msc. Food Science and Technology, Ghent University, Belgium \*\*Distinction\***

Modules: Food Microbiology, Food Chemistry, Food Processing and Preservation, Food Toxicology, Dairy Technology, Food Legislation and Food Colloids.

1992 - 1996: **B.Sc Food Science and Post-Harvest Technology, Jomo Kenyatta University of Agric. & Technology, Kenya. First Class, Hons\*\***

### **AWARDS:**

Third best presenter in the National Council for Science (NCST)- 4<sup>th</sup> Annual Conference for Dissemination of Research Results and Exhibition of Innovations held between 3<sup>rd</sup> to 6<sup>th</sup> May, 2011, Kenya. Theme: Sanitation and Health.

### **Publications**

#### **BOOKS**

Editor(s): Juliana Kiio & Christine Njuguna: Food Safety, from Farm to Fork, Emerging and Re-emerging Issues. Copyright © 2020 Cambridge Scholars Publishing.

#### **Book Chapters**

*Kiio Juliana, Kilonzo Fidelis, Kyalo Daniel, Muui Catherine and Mathenge Scholastica.* "Potential for Wastewater Re-Use in Urban and Peri-Urban Agriculture to Mitigate Household Food Insecurity in Nairobi, Kenya" Book Chapter in the book "Food Safety, from Farm to Fork: Emerging and Re-emerging Issues, Cambridge Scholars Publishing, 2020.

*Daniel Kyalo Willy, Fidelis Kilonzo and Juliana Kiio.* Who Cares? Consumer Attitudes and Purchase Decisions on Peri-Urban Agricultural Commodities in the Absence of Information Asymmetry"

Book chapter in the book "Food Safety, from Farm to Fork: Emerging and Re-emerging Issues, Cambridge Scholars Publishing, 2020

#### **Research articles**

Juliana Kiio, Sophie Ochola, Ruth Nduati, Elizabeth Kuria, Scholastica Mathenge & Judith Okoth. Bioequivalence of Micronutrient Powders to Conventional Fortification on Zinc Status of Moderately Malnourished Children Aged 6-36 Months in Thika Informal Settlements, Kenya. *PLoS One (submitted for publication).*

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.

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 (JEAE)*, Volume 6. No 2 pg .32-40

Co-author, 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.

J. Kiio & B. De Meulenaer (2011). Immuno-chemical detection of peanut (*Arachis hypogaea* L.) proteins using chicken antibodies. *Food and Agricultural Immunology*, 1-10.

J. Kiio & B. De Meulenaer. (2014). Generation of chicken antibodies for the immuno-chemical detection of peanut (*Arachis hypogaea* L.) proteins. The National Council for Science (NCST)- 4<sup>th</sup> Annual Conference for Dissemination of Research Results and Exhibition of Innovations held between 3<sup>rd</sup> to 6<sup>th</sup> May, 2011. Conference proceedings.

## **CONFERENCES**

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, 20<sup>th</sup> to 24<sup>th</sup> May, 2019, Kenyatta University Kenya.

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, 20<sup>th</sup> to 24<sup>th</sup> May, 2019, Kenyatta University Kenya.

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, 20<sup>th</sup> to 24<sup>th</sup> May, 2019, Kenyatta University Kenya.

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, 20<sup>th</sup> to 24<sup>th</sup> May, 2019, Kenyatta University Kenya.

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, 20<sup>th</sup> to 24<sup>th</sup> May, 2019, Kenyatta University Kenya.

Kiio Juliana & Bruno De Meulenaer. Is the detection of peanut proteins by ELISA method affected by processing treatments? International Food Safety Conference, 20<sup>th</sup> to 24<sup>th</sup> May, 2019, Kenyatta University Kenya.

Juliana Kiio, S.Ochola, E. Kuria and R. Nduati. Bioequivalence of Micronutrient Powders to Conventional Fortification on Serum Zinc Levels. IUNS 21<sup>st</sup> ICN International Congress of Nutrition at Buenos Aires, Argentina 15-20<sup>th</sup> October 2017 at the Sheraton Buenos Aires Hotel & Convention Centre.

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).

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).

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. 1<sup>st</sup> Global Conference on Patient -Centered Care at Kenyatta University; 29 September -2<sup>nd</sup> October 2015, Nairobi, Kenya (Oral Presentation).

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) 3<sup>rd</sup> Conference 25-29 May 2015, Arusha, Tanzania (Poster Presentation).

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)- 4<sup>th</sup> Annual Conference for Dissemination of Research Results and Exhibition of Innovations held between 3<sup>rd</sup> to 6<sup>th</sup> May, 2011.

Juliana Kiio. Kenya Institute of Food Science and Technology Students (KIFSTS 1996) Conference, Nairobi, Kenya. Meat preservation using natural plant extracts (*Tamarindus indica*).

### **PROJECTS**

2016-2017: Evaluation of the potential for an Eco-friendly Urban and Peri-Urban Agriculture (UPA) system. A collaborative project (Expertise: Food and nutrition security)

### **CONSULTANCY**

October 2018: Training of farmer groups on Post-harvest handling of fruits and vegetables and value addition of the produce. A project funded by the African Institute for Capacity Development (AICAD).

May 2010: Acceptability of Wheat and Maize Flour Fortified using Different Iron Fortificants (Sulphate, Fumerate, EDTA), A project funded by Flour Fortification Initiative (FFI). This work was published: Randall, P., Johnson, Q. and Verster, A. (2012). Fortification of wheat flour and maize meal with different iron compounds: Results of a series of baking trials. Food & Nutrition Bulletin. Supplement 3, Vol. 33, pS344-S359. 16p.

### **SURVEYS**

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 10<sup>th</sup> to 22<sup>th</sup> 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 5<sup>th</sup> to 17<sup>th</sup> February 2014.

### **WORKSHOPS & TRAINING**

Health Education Partnership Initiative HEPI Manuscript Writing Workshop: 27<sup>TH</sup> Oct, Oct 29, Nov 3, Nov 5, 2020 Virtual training

Participated in a three-day online training on FoodEx2 software use to harmonize food consumption datasets 26<sup>th</sup> through to 29<sup>th</sup> October 2020. FAO ROME

Kenya: **integrated phase classification of Acute Malnutrition Training (IPC AMN v3) Level 1 training conducted virtually** in Kenya, 3<sup>rd</sup>-8<sup>th</sup> August 2020 FUNDED BY EU, UKaid AND USAID

FAO/INFOODS training on Food composition databases 17 – 20 November 2015 - Nairobi Kenya.

Nutrition in emergencies module, Kenyatta University FAO/FSAU: training workshop may 3<sup>rd</sup>-6<sup>th</sup> 2011.

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.

*Neglected and Underutilized Plant Species (NUS)*, Nairobi 24 - 28 November 2008 - Organized by Bioversity International and International Foundation for Science, Sweden.

The 20<sup>th</sup> anniversary symposium on "Research in Applied Nutrition: Challenges and Expectations" in Brussels 3<sup>rd</sup> December, 2004 organized by Nutrition Third World and the Royal Academy of Overseas Sciences of Belgium.

### **Research grants:**

1. Kenyatta University Vice Chancellor grants Evaluation of the potential for an Eco-friendly Urban and Peri-Urban Agriculture (EcoUPA) system (Kenyatta University research grants, 2016) - A collaborative project (Expertise: Food and nutritional security)
2. Kenyan National Council for Science and Technology (NCST) women research grant (2011).
3. Thesis Writing grants:
  - o Council for the Development of Social Science Research in Africa (CODESRIA)(2013).
  - o Association of African Universities (AAU) (2014).

### **Professional Bodies**

Nutrition Society (UK), African Nutrition Society, Kenya Nutritionists & Dietitians Institute, Kenya Association of Food Safety and Protection (KAFSAP).

### **Other Professional Assignments:**

- Member of Kenya Bureau of Standards (KEBS) Technical Committees: KEBS/TC 164 - Nutrition and Health, KEBS/TC 018 - Food Hygiene, KEBS/TC 022 - Food additives
- Secretary General, Kenya Association of Food Safety and Protection (KAFSAP): 2019 to date.
- Member (Scientific Committee) Local Organizing Committee; International Food Safety Conference, 20<sup>th</sup> to 24<sup>th</sup> May, 2019, Kenyatta University Kenya.
- Member of the committee reviewing the Kenyan Food Composition databases co-ordinated by FAO, KALRO and MoH; 2015-2018.

### **Employment History**

**Employer: Kenyatta University** (Sept. 2006 - To date),

**Post:** Lecturer

**Responsibilities:** Teaching and research work in the Dept. of Food, Nutrition and Dietetics, Food Laboratories Committee (Chairperson) Program review committee (member), supervision of postgraduate students, ISO Internal Auditor and student mentor.

**Employer: Brookside Dairy Ltd** (July 2001 – July 2002),

**Post:** Quality/Environmental Officer

**Responsibilities:** Quality Control of finished products, raw material inspection and environmental inspection and implementation of environmental quality standards.

**Employer: Wrigley's East Africa Ltd** (Feb. 2001 – June 2001),

**Post:** Quality control (Contract).

**Responsibilities:** Re-drafting of ISO 9000 Product Quality Standards, Work Instructions.

**Employer: Kenya Co-operative Creameries Ltd** (July 1997 – Dec. 2000),

**Post:** Quality and Production Supervisor

**Responsibilities:** Supervision of personnel to ensure Quality products and timely production targets.