

Dr. Yusuf B. Byaruhanga is a Senior Lecturer in the Department of Food Technology and Nutrition (FTN). Yusuf teaches a number of undergraduate and graduate courses and is heavily involved in research. His research thrust is in the areas of food quality assurance and management systems; chemistry of food during processing; and food product and process development, with special focus on cereals. He has worked with industry and communities to harness and employ food and technology resources in addressing development challenges. He is currently involved in using both indigenous and advanced food technologies to add value to locally available food resources. He has engaged in various multidisciplinary research teams to design technology packages as well as technology transfer and commercialization pathways for improved productivity and competitiveness of small and medium enterprises in both rural and urban communities.

Yusuf has extensive consulting experience, and has worked with a number of entities and projects in various consulting roles. In addition to research and teaching duties at the Department of Food Technology and Nutrition, Dr. Byaruhanga, works with the Food Technology and Business Incubation Center at Makerere University as a Liaison Officer. In his training activities, Yusuf is interested in the application of learner centered teaching methods to stimulate active learning and foster creative and independent thinking among learners. Yusuf obtained his Ph.D. (Food Science) and MSc (Food Microbiology) – Cum Laude from University of Pretoria, South Africa and BSc Food Science and Technology (Hons) from Makerere University. He has had specialized training in Innovation Systems, as well as Technology and Business Incubation. He is an ardent athlete and scholar of socio-cultural issues. Yusuf Fluently speaks English, Swahili, Luganda and Runyakitara.

List of Selected Publications

1. Abbas Kisambira, John H. Muyonga, Yusuf B. Byaruhanga, Phinehas Tukamuhabwa, Silver Tumwegamire, Wolfgang J. Grüneberg. 2015. Composition and Functional Properties of Yam Bean (*Pachyrhizus* spp.) Seed Flour. Food and Nutrition Sciences 6: 736-746

2. Y.B. Byaruhanga, V. Kassozi, R. Wafoyo, C. Mugoya and C. Masiga. 2014. Properties of Extrudates from Sorghum Varieties. *African Crop Science Journal*, 22 (s4): 829 – 836
3. Abbas Kisambira, John H. Muyonga, Yusuf B. Byaruhanga, Phinehas Tukamuhabwa, Silver Tumwegamire & Wolfgang Gruenberg. 2014. Physicochemical Characteristics of Yam Bean (*Pachyrhizus erosus*) Seed Proteins. *Journal of Food Research*; 3, (6): 168-178.
4. A.N. Mbule, Y.B. Byaruhanga, M. Kabahenda, A. Lubowa. 2013. Determinants of anaemia among pregnant women in rural Uganda. *Rural and Remote Health* 13: 2259. (Online). Available: <http://www.rrh.org.au>
5. M. Mukisa, D. Porcellato, Y. B. Byaruhanga, C. M.B.K. Muyanja, T. Langsrud, J. A. Narvhus, K. Rudi, 2012. The dominant microbial community associated with fermentation of Obushera (sorghum and millet beverages) determined by culture-dependent and culture-independent methods. *International Journal of Food Microbiology* 160:1-
6. Nabubuya, A. Namutebi, Y. Byaruhanga, J. Narvhus, Y. Stenstrøm, T. Wicklund. 2012. Amylolytic activity in selected sweetpotato (*Ipomoea batatas* lam) varieties during development and in storage. *Food and Nutrition Sciences* 3: 660-668. DOI: 10.4236/Fns.2012.35090
7. I. M. Mukisa, Y. B. Byaruhanga, C. M.B.K. Muyanja, M. Aijuka, R. B. Schüllera, S. Sahlstrøm, T. Langsrud, J. A. Narvhus. 2012. Influence of co-fermentation by amyolytic *Lactobacillus plantarum* and *Lactococcus lactis* strains on the fermentation process and rheology of sorghum porridge. *Applied & Environmental Microbiology* 78 (12): DOI: 10.1128/Aem.00857-12
8. M. Mukisa, C.M.B.K. Muyanja, Y. B. Byaruhanga, R. B. Schüller, T. Langsrud, J. A. Narvhus. 2012. Gamma irradiation of sorghum flour: effects on microbial inactivation, amylase activity, fermentability, viscosity and starch granule structure. *Radiation Physics & Chemistry* 81 (3):345–351. DOI: 10.1016/J.Radphyschem.2011.11.021

9. J. Kigozi, Y. Byaruhanga, A. Kaaya, N Banadda. 2011. Development of the production process for sorghum ice-cream cones. *Journal of Food Technology* 9 (6):143-149
10. I.M. Mukisa, D.G. Nsiimire, Y.B. Byaruhanga, C.M.B.K. Muyanja, T. Langsrud, J.A. Narvhus. 2010. Obushera: descriptive sensory profiling and consumer acceptability. *Journal of Sensory Studies* 25:190–214. DOI: 10.1111/J.1745-459x.2009.00272.X

Selected Accomplishments

1. In 2002, he developed a preservation method for obushera, a traditional fermented cereal beverage, which is currently and successfully being used by over 20 small and medium food enterprises in Uganda. This technology is directly and indirectly positively impacting on hundreds of farmers and employees.
2. Successfully led regional research teams that developed novel products from sorghum and millet as well as their respective processes which have been commercialized in Uganda, Tanzania and Ethiopia.
3. Trained and mentored tens of graduate students and several young entrepreneurs