

Development of Milk Analog from Cowpea

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Plant based milk are fluids that results from breakdown (size reduction) of plant materials (cereals, pseudo-cereals, legumes oil-seeds, nuts) extracted in water and further homogenization of such fluids, results in particle size distribution in range of 5-20µm which imitates cow's milk in appearance and consistency. Plant based milk substitutes are colloidal suspensions or emulsions consisting of dissolved and disintegrated plant constituents.

The study revealed that the milk contains moisture content (85.24%), crude protein(12.47%) crude fat(9.33%), crude fiber(0.062%) and total ash(2.73%). The micronutrients properties of the cowpea milk contains iron (14.40 Mg), calcium(19.18Mg), magnesium(26.86 Mg) , zinc(1.34 Mg) vitamin B9(0.29 Mg), vitamin B1(0.14Mg), vitamin D(0.01 Mg) and vitamin B2(0.13 Mg). The results from sensory evaluation revealed that the consumer acceptability for taste was; sweet (80%), beany (20%) while aroma in terms of strong beany flavor (10%), mild beany flavor (70%), and neutral (20%).

Biography

My research expertise is in Agricultural Biochemistry and Nutrition, and over the years I have taught and supervised students in various aspects of Biochemistry, and this includes but not limited to food and nutritional biochemistry, ethnopharmacology, bioremediation, and enzymology.

I have served in various leadership positions, and I am currently a member of the Governing Council, Lead City University, Ibadan, Nigeria, and the Dean, Faculty of Basic Medical and Applied Sciences, Lead City University. This has helped me to acquire skills in public speaking, organizational and leadership development. I am also the Chair of the University Research Ethics Committee (UREC). Presently I am working on developing patents that will be highly effective in combating diabetes and COVID-19.

I have also received training in the conduct of institutional accreditation. I was certified in 2021 by the Global University Network for Innovation (Africa) and the African Quality Assurance Network as a Certified Accreditor for Programme and Institutional Accreditation.

In January/March 2022, I received training in New Thrusts in Academic Planning and Development/Upgrading of University Strategic Documents. It was a training programme of the Virtual Institute for Capacity Building in Higher Education (VICBHE). I graduated with a Distinction. I recently completed a training on the Theory and Practice of Strategic Planning and Implementation where I also graduated with a Distinction.

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